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ABSTRACT

This phenomenological case study explored how preservice teachers in a Professional Development School (PDS) internship program experienced supervision. It examined how the interns portrayed and interpreted practices that emerged from the PDS context, how they understood supervision, what the process looked like from their perspective, and what impact this had on their individual and collective sense making of learning to teach within a PDS. Data came from participant observation, field notes, document analysis, and six semi-structured individual interviews. The image of multiple mentoring was used as a heuristic for presenting the interns' understanding of both their formal and informal supervisory practices. There were multiple mentors with whom the PDS interns developed mentoring relationships, including mentor teachers, PDS associates (a restructured role that replaced the traditional university supervisor), children, peer interns, administrators, other school professionals, and parents. Through the year-long internship, interns experienced multifarious supervisory practices which included reflective journaling, guided observations, classroom data collection, supervisory conferences, goal setting plans, triad evaluative conferences, informal intern building gatherings, weekly intern seminar meetings, teacher research projects, and development of Web-based intern portfolios. (Contains 56 references.) (SM)

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The power of multiple mentoring in the context of a professional development school: E pluribus Unum – Out of many, One.

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Abstract

Embedded in the framework of a Professional Development School (PDS) context, this phenomenological case study explores how preservice teachers, known as PDS interns, experienced supervision in their year-long internship. The following research questions framed this study: How did the interns portray and interpret supervisory practices that emerged from the PDS context? Further, as the interns' personal meaning of supervision emerged from the data, the following questions were shaped: How do interns understand supervision? What does this process look like from the intern's perspective? What impact does this have on their individual and collective sense making of learning to teach in a PDS context?

The use of 'multiple mentors' as an image is a heuristic for presenting the interns' understanding of the process of supervision. From the data analysis, multiple mentors emerge with whom the PDS interns develop mentoring relationships: mentor teacher/s, Professional Development Associate/s (a restructured role that replaces the traditional university supervisor), children, peer interns, administrators, other school professionals, and parents. Throughout the yearlong internship, interns experience multifarious supervisory practices. For example: reflective journaling, guided observations, classroom data collection, supervisory conferences, goal-setting plans, triad evaluative conferences, informal intern building gatherings and weekly intern seminar meetings, teacher-research projects, and the development of web-based intern portfolios.

Through engaging in supervisory practices that inquire into self, context and community, children's thinking and ideas, and teacher identity, interns begin to individualize and internalize the function of supervision. As they begin to recognize and identify their supervisory needs, interns become active constructors of their knowledge about teaching and learning. They become co-directors of their professional growth. The interactive nature of the intern-mentor-PDA triad becomes a means of professional and personal growth, and not an evaluative hoop that has to be jumped through during the capstone experience of student teaching. The PDS interns develop an understanding that supervision is a vehicle for inquiry and experimentation, and a process of formative supervision. Interns' personal meaning of the function of supervision shifts from thinking of mentors 'apart' from to 'a part' of their professional growth. Within the supervisory learning community, interns are 'raised' by multiple mentors with whom they individually and collectively begin making sense of learning to teach and teaching to learn in the context of a PDS.

Current initiatives are examining how creating and sustaining learning communities of teachers enhances success for our increasingly diverse school student population. During the 1990's the shape of teacher educational practices has changed, creating a new mindscape about how best to prepare teachers. The purpose of this study was to explore how supervisory practices generated by a PDS community provided interns with a framework for making sense of their beliefs about teaching and classroom practice. The following research questions framed this study: How did the interns portray and interpret supervisory practices that emerged from the PDS context? Further, as the interns' personal meaning of supervision emerged from the data, the following questions were shaped: How do interns understand supervision? What does this process look like from the intern's perspective? What impact does this have on their individual and collective sense making of learning to teach in a PDS context?

It may be useful to state that this paper is not intended to provide a comparison between supervision in a traditional student teaching setting and that emerging in the context of the PSU-SCASD Professional Development School program. My intention here is to offer ways of thinking about a process of supervision that is illustrated by newly emerging understandings of mentoring practices portrayed by preservice teachers living this PDS experience. This mindscape for understanding supervisory practice is based on the images and assumptions that underlie the educational purposes of learning to teach and teaching to learn in a Professional Development School program: developing interpersonal and working relationships for novice and experienced educators, undertaking genuine problem-solving skills to work toward common goals, developing a shared vocabulary, and understanding how using inquiry to analyze teacher thinking and behaviour assists teachers shape schooling experiences for children that enhance success.

Goldberry's (1998) portrayal of the "idiosyncratic rather than generalizable (among the participants) nature and benefits of involvement in supervision" (p. 444) highlights the need for research to focus on in-depth exploration of how particular supervisory functions are embedded in context. In response, this research examined the process communal supervision nurtured within the context of a Professional Development School (PDS). The existing PDS literature points to the need to deconstruct the interns' yearlong experiences if we are to understand and recreate that experience for others. The multifaceted and convoluted nature of this internship demands that researchers seek to understand the impact of such experiences on the preparation of preservice teachers. In exploring these questions, this article forges links between the fields of reflective supervision, mentoring, and preservice teacher preparation in a Professional Development School community.

A consideration that evolved from the current scholarship draws attention to the integration of supervision and teacher inquiry within a school-university relationship described by Cochran-Smith (1994) as "collaborative resonance" (p. 149). The research suggests that such interplay provides practitioners with a teacher-directed framework for understanding and making sense of their daily teaching practice as they establish a 'consensual domain' (Garman, 1986). According to Garman clinical supervision, as professional practice, is a "potentially powerful vehicle for helping teachers think about and plan instructional improvement" (p. 156) for building an educational community of life-long learners. An aspect of the supervisory relationship is the development of inquiry skills as the participants collaborate. Garman (1982) discusses the consensual domain as a theory of learning, as it "exists for a social community of cognition" (p. 205). She claims that we must do more than think about establishing a nurturing relationship of support. Garman posits that clinical supervision can be effective only if we understand the need for a consensual domain to be part of the practice.

> Consensual domain goes beyond the one-to-one interaction of two individuals. It involves a community consensus, a home, for the practice of clinical supervision. (p. 206)

Nolan and Francis (1992) purport that group supervision is "a function, not a role," a collaborative and inquiry-focused process, "the primary aim of which is learning about and improving teaching" (p. 55). Group participants subscribe to the belief that understanding practice through questioning instructional processes and fostering student learning are the outcomes of group supervision. Say Nolan and Francis,

> Given the research on cooperative learning and teacher collegiality, we hypothesize that if supervision were carried out as a group process in which the supervisors and teaches were interdependent in achieving group and individual goals, the process of supervision would become more effective in helping teachers learn about and improve their teaching. (p. 56)

It is worthwhile to note that although I have drawn on selected research from the voluminous and historical supervision scholarship, the unit of analysis is the individual intern's conception of supervision. The paper focuses on what supervision looks like from the perspective of interns engaged in a yearlong PDS internship and how interns make sense of mentor teachers' supervisory practices offered within the PDS community.

Context of the PDS Community

The establishment of two professional development schools in 1998-99, and the further addition of two other elementary schools in 1999-2000 was the culmination of a six-year planning program centered on nurturing relationships between the State Area School District and the Pennsylvania State University. This partnership grew from the shared vision of an initiating group of faculty and administrators from this university, and principals and teachers from this school district. The members of this community believed that their collaborative efforts could result in better teacher preparation opportunities for preservice teachers and enhanced learning environments for the children in the public school system of this area.

The participants in this research were senior education undergraduates who completed a yearlong internship in the Professional Development School partnership. While the six interns were from Pennsylvania, Diana and Kathryn grew up in small, rural communities. Caran and Sally attended suburban K – 12 public schools. Colleen spent her earlier educational experiences in an urban setting, and Mark was a non-traditional student who had previously worked in the music industry. The process of selecting and matching each intern with a mentor teacher/s for the yearlong internship was co-ordinated by team of university faculty and mentor teachers. The interns commenced the program in the mid-August and followed the school district's calendar for the duration of the school year. All six interns graduated at the end of the university academic year and continued to teach until the last school day in June.

Personal Bias

In response to Wideen, Mayer-Smith and Moon's (1998) call for authors to 'go public' about their sociocultural location and value commitment, and discuss, and perhaps problematize, their beliefs about preservice teachers, teacher education, and the interventions they have designed" (p. 163), I outline (somewhat briefly) my espoused platform and commitment to PDS work as a researcher and a Professional Development Associate. In adopting a qualitative inquiry stance, I respect the importance of "looking inside to become aware of personal bias" (Patton, 1990, p. 407). Similarly, Merriam (1998)

elaborates this process as the researcher acknowledging "prejudices, viewpoints or assumptions regarding the phenomenon under investigation" (p. 158).

One bias that I must address is my personal pro-professional development school stance. I believe that professional development schools can benefit all the stakeholders. It is my opinion that the professional dialogue generated in a community for learners enables new knowledge and understandings to be built by the participants, thus facilitating inquiry and professional growth. However, I am not advocating a PDS learning community experience is essential for all preservice teachers, nor am I using this research to make such a claim.

Dual role

The nature of the research necessitated that I perform two roles. As a teacher educator, known in this program as a Professional Development Associate (PDA), I provided supervisory support for the professional development of the interns and the mentor teachers. I visited the school sites daily for the duration of the internship, conducted observations of the interns, spent time in the classroom with the mentor teacher, intern, and children, and when requested co-taught with the mentor and/ or intern.

In monitoring each intern's progress, I was aware of my somewhat contradictory PDA supervisory responsibilities: to assist interns to analyse their transitory teaching identities and emergent practices, and to assess (collectively with the intern and the mentor teacher) their teaching performance. In the cases of three of the six research participants, I was ultimately responsible for allocating a student teaching grade.

The second role I played was one of participant observer. Being a member of the learning community necessitated the participant aspect of my researcher's role. My challenge was "to combine participation and observation so as to become capable of understanding the learning community experience as an insider while interpreting the experience from an outsider's perspective" (Patton, 1990, p. 207).

The common goal the researcher and PDA shared was that of advocate for the members in the PDS community. I sought to understand the interns' supervisory experiences in as great a depth as they were prepared to share. This meant building and sustaining professional relationships, regardless of my role. I found no compelling evidence to suggest that this dual-role of researcher and PDA adversely affected the authenticity of the experiences of the participants or the validity of the data collection process.

Theoretical framework

This exploratory research employed a phenomenological case study described by Moustakas (1994) as an "empirical approach involving a return to experience in order to obtain comprehensive descriptions that provide the basis for a reflective structural analysis that portrays the essences of the experience" (p. 13). The supervisory relationships of the six interns with their mentor teachers defined the bounded case study (Merriam, 1998). Although I have drawn on selected research from the voluminous and historical supervision scholarship, the unit of analysis is the individual intern's perception of supervision.

Data collection and analysis

Participant observation, extensive field notes, document analysis, and six semi-structured

individual interviews were used to portray the supervision process from the interns' point of view. All transcriptions were analyzed using NVIVO computer software (Richards, 1999). Multiple readings identified categories (Patton, 1990) that emerged within each intern's narration. Line by line analysis of the transcripts resulted in the definition and construction of conceptual categories at "free nodes" and then to "nodes" in the tree-structure. I developed memos, defined as further data, to record category development and my ongoing thinking and attached these to indexing categories. Finally, I framed and tested themes and assertions from the within-case analysis through support provided by NVIVO's concept modeling function. Additionally, data analysis probed for contradicting and sanctioning evidence for the themes (Erickson, 1986).

In addition to the transcriptions being reviewed by the participants, three member checks were conducted. As the narratives were written, each intern was asked to read and give feedback. During the second member check, coded data from the within-case analysis were distributed for review. Finally, a third member check was conducted of the assertions drawn from the researcher's interpretation. These were submitted to the six interns for comment. Prior to publication, the interns were asked to validate the accuracy and authenticity of the researcher's "thick description" (Patton, 1990). The interns suggested grammatical changes, but did not make any specific modifications to alter the meaning of the text. In conjunction, data were triangulated with another researcher who was similarly exploring the experience of interns in the same PDS program.

Findings

Because the reported research on supervising interns in a yearlong Professional Development School internship is truly embryonic, much of the literature woven through the text is drawn from supervision in traditional student teaching, and reflective supervision. The findings illustrate how the interns in this study experienced supervision in their year-long internship in the PDS context. The PDS community nurtured a learning forum in which these novice teachers articulated and examined their beliefs about teaching and learning, and analysed their classroom practices. Within this collegial environment, the PDS interns created personal meanings of their supervisory experiences.

The image of 'multiple mentoring' is a heuristic for presenting the interns' understanding of both their formal and informal supervisory practices. From the interns' perspective, multiple mentors emerged. The interns described formal supervisory relationships with many teacher educators in the PDS community – mentor teacher(s), Professional Development Associate(s) (the restructured role that replaced the traditional university supervisor), and methods course instructors. They also highlighted their informal supervisory relationships with children, peer interns, administrators, other school professionals, and parents. Further, the interns portrayed their self-analysis and reflection as important aspects of the formal and informal mentoring. By engaging multiple mentors in the processes of both formal and informal supervision, the interns raised their voices, explored multiple perspectives, and questioned, monitored, and adjusted their teacher thinking and behaviour. Diverse mentors offered the interns different ways and differing perspectives of learning to teach elementary children. In response, interns filtered, interpreted, and negotiated these complex interactions. The synergistic power of emerging supervisory relationships between the PDS community members afforded the interns spaces to shape and reshape their provisional understandings of learning to teach.

In adopting, Fairbanks, Freedman & Kahn (2000) redefinition of mentoring as "a teaching/learning situation in which student teachers are cognitively and affectively changed as a consequence of their mentoring experiences" (p. 103), the findings reveal a reorganized framework in which the process of

preservice supervision reshapes its paradigm. The findings detail supervision shifting from the traditional student teaching triad with its embedded power structure to a community of multiple mentors in which hegemonic relationships are challenged and democratized, and inquiry is infused.

The first section of the findings highlights the PDS interns' formal supervisory experiences in the PDS context.

Formal Supervision

Table 1
Emergent Themes: Formal Process of Supervision

Themes	Sub-themes
Mentor teacher	• Trusting relationship • Dialectic relationship • Collegial relationship: feedback, reflection, and reciprocal observation
Teams of mentor teachers	
Professional Development Associate(s)	• Readiness and relationship building • Assist versus assess • Supporting children's learning • Collaborative dialogue • Meeting individual intern supervisory needs
Methods Course Instructors	

The emergent findings (Table 1) depict a formal supervisory process that nurtured collaborative relationship between those who are preparing to teach and those who are members of the teaching profession (Johnson, 1997). These university and classroom based teacher educators offered the PDS interns different ways and differing perspectives on learning to teach elementary children. In response, the interns filtered, interpreted, and negotiated these complex interactions. The synergistic power of emerging formal supervisory relationships afforded the interns spaces to shape and reshape their provisional understandings of learning to teach. The deep commitment these community members showed to building supervisory relationships within the PDS community enabled the interns to feel connected and cared for. Diana commented in a journal entry close to the end of her internship:

> I know I couldn't be the teacher who I think I am if it were not for the ever-present support of all the members of this school. I feel very much part of a team. Over the course of a year I have developed relationships that have made me realize how important belonging to a community really is. It's hard for me to point to any one particular person and say he/she is the one who helped me grow. So many people have been a part of that process. It makes me feel as though I can do this. I

> can teach somewhere else that I have not been before. It may be uncomfortable to start, but I know I can do it. I will find others to become a community like we have developed this year. And, I know I will be a better teacher for it. (May 2000).

Mentor teacher

While detailed analysis of the roles, responsibilities, and rituals of the mentor teacher was beyond the scope of this study, the interns' experience of being supervised by a mentor teacher in an intensive year-long relationship is portrayed.

The scholarly literature cites cooperating teachers in traditional field experiences as being most "influential, important, and essential to the teaching experience of student teachers" (Glickman & Bey, 1990, p. 558). While describing how "cooperating teachers set the affective and intellectual tone," Feiman-Nemser and Buchanan (1987) proposed that cooperating teachers "shape what student teachers learn by the way they [the cooperator teachers] conceive and carry out their roles as teacher educators" (p. 256). The literature suggests that cooperating teachers construct definitions of their roles, responsibilities, and rituals based on their own experiences as student teachers (Koerner, 1992). Ambiguous directions and nebulous supervision guidelines have resulted in cooperating teachers personally constructing definitions of their roles and responsibilities (Kagan, Dennis, Igou, Moore, & Sparks, 1993). The consequence of this self-definition is a wide variance in roles and activities that may reflect the unique pathways of the teacher's career (Kagan et al., 1993). Consequently, some cooperating teachers view themselves as instructional role models, sounding boards, and resources (Tannehill & Zahrajesek, 1988); some encompass guided participation (Colton & Sparks-Langer, 1991), others incorporate systematic reflection through triad journaling (Silva, 1999), and a few support student teachers inquiring into teaching practices (Gore, 1991; Wood, 1991).

In describing their supervisory relationships in this research, interns portrayed three aspects. First, mentor teachers expressed to the interns their need for trusting relationships that would be nurtured over time. In establishing these, the mentor teachers and interns shared why they decided to become part of this program and, in some cases, described in detail their commitments. Mentor teachers supported the interns as they negotiated spaces to figure out their roles in the classroom and develop relationships with the children and other adults. Second, the interns described a dialectic relationship with their mentor teachers who talked aloud about their everyday classroom practices, lesson planning, and decision-making strategies. Mentor teachers made explicit what they do and the reasons why. As mentor teachers identified and discussed aspects of their teaching practice, the interns reflected on their own transitory teacher identities. Mentor teachers and interns discussed the reasons for their teaching decisions and actions, and the difficulties inherent in assessing what children know and what they need to know. Mentor teachers offered relationships that created spaces for interns to ask questions. They modelled how to probe and extend student thinking by posing questions to the interns. Third, evolving collegial relationships birthed collaborative reflection, effective feedback, and reciprocal observation. Mentor teachers suggested ideas for constructing developmentally appropriate activities for the children's learning. They provided the interns with specific feedback about their teaching. The interns were 'given permission' to try out activities they designed.

Trusting Relationship

'Relationship, trust, communication, and role' were descriptors consistently used by the interns as essential 'ingredients' of their mentoring by their classroom teachers. If the intern and mentor teacher relationship was to 'rise' to its full potential, both the interns and mentor teachers believed there must be

a solid 'dough' of trust and collegial friendship. "If this was in place, other conflicts of differing teaching philosophies, differing approaches to students, and different planning styles had a chance to be resolved in such a way that everyone had a chance to improve their teaching" (Colleen, Interview, March 2000). Initially, the interns described their efforts to begin a trusting relationship as the first step toward establishing "my teacher as my mentor" (Caran, Journal entry, November 1999). Developing and nurturing a trusting relationship between a mentor teacher and an intern was an emergent and fragile process. Relationship building began with the matching process between the interns and the mentor teachers. The interns believed that this process helped them to recognize and begin to feel comfortable with the mentor teachers from across the four elementary buildings in the PDS program. After the assignments were made (before the end of the previous school year), each intern contacted his/her mentor teacher/s. Diana described the various meetings and lunches over the summer as a period of

> getting acquainted with each other away from the classroom. Phone conversations and lunchtime talks gave us a base knowledge of our families, our schooling experiences, and who we are. (Interview, September 1999)

When the internship began in earnest in the mid-August, Diana felt that the relationship she shared with Margaret was developed strong enough to help her [Diana] feel at ease with all the new aspects of her life. Likewise, Kathryn and Sally established beginning relationships with their mentor teachers. Colleen and Mark met their mentor teacher at the beginning of the Jump Start Program in mid August. Caran had a previously established friendship with the family of her mentor teacher.

In a relationship imbued with trust, communication became the accepted and expected norm for the intern and mentor teacher. When the intern struggled to voice how her mentor teacher could guide her, Diana's mentor teacher worried that she was not giving enough support to enable her intern to figure out what her goals were. Diana expressed her concerns in a triad journal entry.

> I don't know what I need half the time in order to make my life as a learning teacher more defined. There is no guideline that anyone can turn to and say, "on January nineteenth, Diana will need to hear this in order to make sense of her learning to teach. When I don't know what I need, I can't express it to Margaret. If she doesn't know what I need, then she worries. (Journal entry, February 2000)

A three-way conference with the intern, mentor teacher, and PDA helped lessen the concerns of both parties. Diana and Margaret recognized that many of the worries emanated from their mutual professional and personal concern for each other. While they found ways to keep each other informed, Diana and Margaret respected each other's spaces to think differently and reflect individually.

In order to learn from his mentor teacher, Mark felt it very important that the mentor teacher like him. He acknowledged the personal tension that he experienced when he was not comfortable with his feelings toward his mentor teacher. He described the dissonance he felt as "tough to get the relationship to work. I want to work with this person and learn from this person. But she seems so different to me in her beliefs about teaching and children." As his PDA guided him toward ways to open up the communication channels with his mentor teacher and to examine her beliefs through a different lens, Mark declared, "Here I am. This is me. I'm coming out" (Interview, December 1999).

One of the most challenging problems of being an intern is successfully playing the roles of student

and teacher. When a mentor teacher provided an intern with the credibility that she needed by presenting her to the students and parents as a co-professional, Kathryn found it relatively painless to establish her role in the classroom. All parent letters that went home in the first few weeks of school contained the names of both the mentor teacher and the intern. Each morning letter that was addressed to the children and written on the whiteboard ended with both teachers' names. Both mentor teacher and intern assumed responsibilities for daily classroom procedures, as well as for leading morning meetings. By presenting her to the class and community as a young teacher with credibility, Kathryn felt that her mentor teacher Jayne carved out a place for her to grow.

Dialectic Relationship

One of the challenges that the interns faced while learning with an experienced teacher is helping their experienced partner make explicit his or her beliefs about children and teaching. The interns figured out ways to actively listen and constantly probed their mentor teachers' thinking. The interns learned from their mentor teachers who shared their thinking with them prior to a lesson. When an intern listened to a mentor talk through the lesson and verbalize the outcomes, the intern could visualize what her mentor expected the lesson to look like. This background information helps interns make sense of how the lesson is playing out – keeps the intern from watching the lesson in a vacuum. Interns can generate further questions when parts of the lesson do not materialize the way they were discussed in the pre-lesson conference. Additionally and most significantly, informal conversations between the mentor teacher and the intern during lessons enabled the intern to become more comfortable with the particular class of children they were living with on a daily basis.

As they began to make sense of what the children were doing and saying, interns probed their children's conceptual understanding in ways that helped them to make connections between their mentor teachers' interpretation of the objectives for the lessons and the outcomes for the children. Interns' and mentor teachers' talks focused on what they saw and heard the children doing. For example, when she noticed Ryan (and others) having some difficulties taking notes on video about tectonic, Sally questioned the purpose of the activity. Were the children "supposed to figure out some scheme for note-taking or was it more important to get the gist of the earth movement process down and worry about the form of note-taking later on?" (Journal entry, November 1999) Her mentor teacher explained that the goal of the lesson was a combination of both objectives. As a result, Euon and Sally planned a mini-lesson to reinforce note-taking skills. While Euon delivered the lesson, Sally spent time with Ryan trying to ascertain what it was that he was having difficulties understanding and ensuring him that he was able to generate a table for noting important concepts.

When their roles were reversed, the intern led the mentor teacher through the lesson plan and articulated how the activities met the objectives and the student outcomes. They posed questions that clarified aspects of the lesson for both parties. In this excerpt Colleen described the process of the pre-conference and the expectations of her mentor teacher.

> She talks with me before I teach about what I planned, why I did it this way, and where she is a little concerned. When I give her the lesson plan, she reads it, and then asks me to clarify aspects. She might identify some gaps and ask, 'Did you think about what the students might do if they finish early?' Or, 'How are they going to get jobs? Am I going to put them up on the board and let them choose, or am I assigning the job? Have I set up a way that students can figure out what each job is?' Karen wants to make sure that I've thought through the steps of the lesson. That way, she can see what I think the lesson

should look like. I plan it myself. (Interview, February 2000)

Caran's mentor helped her to understand the process of weekly planning by explaining what she was doing and thinking as she penciled in the order and content of lessons.

> She thinks aloud while we are planning. This means that I can ask why and add my ideas. She talks about the various children and the ideas she has for different tasks. Since we have a split class of third and fourth grades, we really need to know what activities we can do that will work for us all. (Interview, December 1999)

Embedded in the dialectic relationship, Margaret used puppets and role-playing to model and present opportunities for Diana to reflect-in-action (Schon, 1983). Diana learned to "play it by ear" as she, Margaret, and Spanky [the class mascot] shared unrehearsed conversations during the morning meetings. As her responsibilities for the morning time increased, Diana gradually "found her voice." She began to recognize Margaret's cues and used these to figure out ways she could probe the children's ideas. Diana described ways that Margaret talked aloud to show her ways of keeping the children focused. This conversation also clarified the next steps in the lesson for Diana. For example, "if we are preparing for math workshop, Margaret will cue me to get the centers prepared while she finishes giving the children the instructions. This way I understand what needs to happen next. She verbalizes for me what I should be thinking about without directly telling me. I get the hints, but I have to figure out how to get the centers prepared, what materials need to go on what tables and which groups will be starting where" (Diana, Interview, October 1999).

The interns' conversations with mentor teachers were not always about the dailiness of classroom teaching. As trust grew, the interns and mentor teachers discussed the different ways of teaching and questioned accepted principles of learning. Colleen and Karen debated how best to teach mathematics given the constraints of a district-wide and standards-driven curriculum. Karen provided space for Colleen to question the curriculum and her beliefs about teaching content knowledge. As she said,

> I'll ask her questions. Sometimes we have a theoretical discussion. For instance, we've talked about whether it is important to teach conceptually, or whether it is acceptable for children to only know the procedure. My feeling is, for multiplication, like a two by one number, the first thing we know you do is the ones column and then if you have to carry, and then you do it diagonally and you multiply. I don't understand conceptually what that means. I can do the procedure. I know what to do, and I can get my right answer. Does it make a difference if children understand that procedure? She and I discussed that for half an hour. I think it is necessary for children to know what each order of an operation is and when they need to use it. I'm not sure that it really makes a difference. I cannot think of many professions that it really matters if I can break down an algorithm and explain why I do it. (Interview, February 2000)

Asking, paraphrasing, and posing questions were effectively cultivated within these dialectic relationships. Initially, the interns passively listened to mentor explanations and posed questions related to organizational issues in general. As their relationships, classroom experiences, and understanding of the children deepened, the interns sharpened their questioning. They asked, "Why are we doing it this way?" Or "Is there a reason why we are doing it this way rather than that?" While they acknowledged their mentor teachers' ideas, the interns contributed to on-going conversations about different ways to

construct a lesson. "If we're doing that, then what do you think about this idea for the next math lesson?" Later in the internship, the interns' constructed questions that focused on a child's needs and understanding, and how to effectively assess the children's prior knowledge in order to design specific activities to enhance learning. Colleen explained this process:

> The questions I now ask my mentor focus my thinking on what children know, what they need to know, and how I can devise lessons that move their understanding from where it is to where it should be. I also ask lots of questions about standards. I can see their importance, but I need to see how these fit. I am trying to understand ways that they direct what and how we teach the curriculum. I am always asking my mentor how this objective relates to the standards, particularly in Then, I can go back to my mentor and she will help me understand how it works for the children in our room. I am still learning how to know at what level, say of reading or math, each child is. If there is something I do not understand, my mentor is always more than wiling to share. (Colleen, Interview, February 2000)

Kathryn illustrated how her mentor teacher assisted her to phrase meaningful questions. At the beginning of the internship, Kathryn really did not know what questions to ask the children. Consequently, she spent much teaching time concentrating on what to do next with the children and worried about what she would do if she did not know the 'right' questions to present. She believed that she was living a process of asking questions and getting answers, and not focusing on the content or the children's cognitive understanding. Over several months, Jayne's modelling of questions and conversations with Kathryn about what sense she made of this process led Kathryn to anticipate what the children might say. Kathryn developed ways that she could further probe a student's thinking:

> Now when a child gives me an answer, I am much more prone to say, 'Tell me more about that', or 'I don't understand what you're saying. Could you explain it or could someone else help explain that?' I don't think I ever did that in the first months of school. I learned that from Jayne because I saw her doing that with the children. It is an effective teaching strategy to ask the child to explain more or to describe something in greater detail. This helps them make better sense of their understanding, and also benefits the other children. (Kathryn, Interview, February 2000)

Showing interns up front that teaching is an evolutionary process did much to dispel their notion that teaching emerges from one definitive set of rules and procedures. The interns appreciated not being told how to develop and express expectations to the children. Rather than telling them how they did this, the mentor teachers asked the interns how they thought children came to understand what was expected of them as learners.

> My mentor teacher asked me what I was thinking. She didn't say, 'Tell the children to sit with their legs flat on their floor, their bottoms on their chair, and their hands in their laps.' I had to come up with my own ideas because it is my center. I had to set my own expectations about what I was looking for. After she asked me what expectations I set, I started looking at how she sets expectations for the children. I noticed that she sets expectations for them for every task. The children know what to do and what is expected in their work. Next, I had to figure out ways to do this that felt comfortable for me. We talked about how and why we give these – what does she do that works for her, and what

> do I do that works for me? Sometimes, I think about how the children see the different expectations. I think they see us as being different, but the goals are the same – the teachers want us to do our best work, our best learning. I truly believe my mentor teacher sees that for us too. (Diana, Interview, September 1999)

Student teaching does not always turn out to be the learning opportunity it is intended or expected to be. Differences in expectations for the cooperating teachers' role in facilitating preservice teachers' learning through field experiences and poor communications account for many of the dilemmas experienced by traditional student teachers (Guyton & McIntyre, 1990). Consequently, in a relationship in which communication between an intern and his mentor teacher was nebulous, Mark struggled to help his mentor teacher make her thinking explicit. In the fast pace of the classroom activities, Mark found it difficult to clearly express his needs, and his mentor teacher was unable to respond to Mark's many questions at a level of thinking that a novice teacher could understand. Mark's constant questions were interpreted by his mentor teacher as too much talking, and not enough doing. When he was unable to probe his mentor teacher's thinking, Mark conversed with his PDA, another mentor teacher, and peer interns. Mark declared,

> I would like to talk to my mentor teacher, and hear what she has to say. 'How do you do this? Why? Let's think about this lesson. How can we make it better?' Two heads can be better than one. I like using my imagination and thinking differently, but I am learning that I don't really like doing it alone. (Mark, Interview, September 1999)

Interns recognize that the role of the mentor teacher is time consuming and multifaceted. Sometimes mentor teachers find it very difficult to make explicit their thinking and knowledge about teaching. As her mentor teacher struggled to talk about her practice, about why she did some activities one way, and others another, Diana worried about the pressure she imposed by asking so many questions. As she adopted a more active role in the classroom and started to understand other components of teaching, such as planning units, understanding children's development, and recreating a community, Diana recognized why her mentor teacher felt pressure. Diana accepted that she was the source of many of her mentor's worries, saying,

> If we didn't have these worries, we wouldn't be growing. That is a hard reality to face, but it sure does help me better understand her point of view. These worries are not implications of the job she is doing as a mentor. They are indicative of my learning to teach! What a wonderful thing! Many questions that I have aren't because she hasn't offered answers. Her work inspires me to be curious, to want to know more. (Diana, Journal entry, January 2000).

Collegial Relationship – Feedback, Reflection, and Reciprocal Observation

Through journal sharing, intern, mentor teacher, and PDA raised questions about what an effective mentoring process looks and feels like. On-going triad conversations about how best to mentor each other fostered open communication within our supported and mutually respected relationships. As these mentoring partnerships evolved, interns and mentor teachers increasingly referred to their relationships as collegial. Colleen recognized Karen as

> the authority in the room. She is the certified teacher. I am learning to teach – that is my role and responsibility. At the same time, I believe that she views me as a colleague. She

> respects and values my input. We give each other feedback, especially when we co-teach. (Colleen, Interview, February 2000)

As the interns portrayed how information from their mentor teachers furnished insights about their practice, 'feedback' was identified as an emergent descriptor. Successful implementation of supervision during student teaching is predicated on the ability of those supervising to furnish systematic observation and feedback. When objective data were used to provide feedback about teaching practice, the intern recognized the information as a true representation of what actually happened in the classroom (Acheson & Gall, 1997). Effective feedback from cooperating teachers is described as recurrent (Blank & Heathington, 1987; Woolever, 1985), specific (Acheson & Gall, 1997), ongoing (Tannehill & Zahrajesek, 1988), and appropriate to the student teacher's needs (Acheson & Gall, 1997). Research studies suggest that cooperating teachers trained in the process of clinical supervision provide significantly more feedback and promote greater collaborative relationships than teachers who have not received supervisory training (Killan & McIntyre, 1987; Edwards & Wilkins-Canter, 1997). In some cases, student teachers are dissatisfied with the cooperating teachers' approach to supervision (MacKinnon, 1989).

In a synopsis of their review of literature on field experiences, Guyton and McIntyre (1990) indicate that the conference element of formal supervision is "dominated by cooperating teachers and involves low levels of thinking and descriptions and direction-giving interactions predominate. In adopting a passive role, student teachers' analysis and reflection are not common" (p. 525). In contrast, the interns in the PDS context took on an active role in the supervisory process. Kathryn described how the active role offered by her mentor teacher allowed her to direct the post conference. Following the example of clinical coaching methods, Kathryn said,

> Jayne asked me, "How do you feel about the lesson?" I was able to express my understanding of the lesson. Then she guided my interpretation by questioning me about what I liked about the lesson. We ended by talking about what I would do differently if I could teach it over. (Kathryn, Interview, December 1999)

Such collegial conversation enabled the interns to use systematic information to identify their strengths and weaknesses and to formulate strategies to facilitate changes in their thinking and doing.

Despite his "more passive role in the classroom," Mark recognized the reflective potential of Susan's feedback. Adopting a direct and upfront approach to supervision, his mentor teacher analyzed Mark's teaching practice and gave him "useful" feedback that was both written and oral. Mark recognized this as an opportunity to identify patterns in his practice that he was previously unconscious of. "I am not moving fast enough." He considered whether or not his teaching was "dragging" because he was "asking too many questions" and "if the length of lesson meant that it should be broken up" (Mark, Interview, December 1999). His mentor teacher stated that he "asked questions of twice as many boys as girls." Although Mark was unaware of this, he thought about his decision-making process for asking children to respond to the questions he posed. He commented about which children raised their hands. "Boys! Instead of saying, I am going to ask people who are not raising their hands, I try to get them to participate." The dilemma he faced was encouraging the girls to contribute their ideas. "Bringing it to my attention has helped to try to figure out ways to help all the children participate" (Mark, Interview, December 1999).

Unlike the traditional student teaching where a unidirectional act of handing over the reigns of

classroom activities occurs at various points, the mentor teachers engaged the interns in the PDS internship in a constant exchange of the reigns. This pattern of exchange between the role of observer and teacher reduced the confusion and frustration that preservice teachers experienced as a result of receiving inadequate or unhelpful feedback on their teaching (Feiman-Nemser & Buchmann, 1987). When Kathryn felt she was ready to try morning greetings, she and Jayne worked out a schedule that permitted Kathryn to direct opening time three mornings a week and observe Jayne (or another teacher in the building) during the other two. This pattern continued throughout the internship. Kathryn and Jayne recognized the benefits of interchanging observing and teaching, as Kathryn noted:

> By going back and forth between teaching and observing, I can identify those aspects of my practice that seemed to bother me when I was teaching, but I couldn't quite pinpoint. When I observed Jayne after trying some of the activities myself, I felt better able to talk about the experience and figure out what worked for me. I felt confident to try a variety of opening tasks. That way, I did not get stuck in a rut of doing the same activities. (Kathryn, Interview, December 1999)

Likewise for Diana the pacing of lessons and opening activities had been on her mind. After the winter break, she said she engaged in a conversation with her PDA and explained how she watched her [mentor teacher] and then how they exchanged roles. Afterwards, "we talked about what we each saw. The next day when it was my turn to lead opening, I used all that information and put it into practice" (Diana, Interview, February 2000).

Similarly while teaching a lesson, Caran requested that her mentor teacher model ways to keep the children focused on the task at hand. Caran needed time to observe her mentor again and to become reacquainted with some of these teaching strategies. She reflected,

> I am in the middle of a lesson. A child raises his hand and asks a question that has absolutely nothing to do with what we're talking about or doing. If they have a question, I want to answer it. I want to help them feel comfortable if something is bothering them. At the same time, I cannot stop and answer every question and achieve my goal of completing the lesson. I needed to observe Mrs. Whead. When a student asked her a question, she said, 'Does this have to do with what we're doing right now? No. Then, I need you to ask me that question when we're done.' She modeled for me how to handle that kind of situation. These were questions Mrs. Whead knew were on my mind. She showed me some ways, and I put them into practice. She and I discussed afterwards the different ways we can do this. (Caran, Interview, December 1999)

Likewise, Colleen recognized that she needed to "communicate with each child in a way that felt right" for her (Interview, December 1999).

In the next section of the findings, patterns are highlighted that show how teams of mentor teachers and special mentor teachers supervised interns in the PDS community.

Teams of Mentor Teachers

Participating in teams of teachers exposed the interns to differing perspectives of individual team members. Depending on the grade level of their mentor teacher, each intern was part of a division team that was responsible for designing ways to implement the district's curriculum units. In the middle of her

internship, Colleen indicated that the most satisfying experience in the PDS setting was "working on a division team." She believed that she had six mentors who not only supported her learning to teach in practical ways, but also offered Colleen multiple views of thinking about how she could be herself in the classroom. "When I hear teachers talk about how they see differing ideas fitting into the curriculum, I think about what that means for me" (Interview, December 1999). This sense of community within the division team meant that Colleen felt comfortable directing her questions to any of these teachers. An intern from the previous year's PDS program was a member of this division team. Colleen often talked with her about aspects of the PDS curriculum that confused and overwhelmed her. Amy helped Colleen to understand how to organize the university-school workload to make it doable.

Teams of mentor teachers modelled for interns how to build relationship with, and recognize the strengths and differences of, various team members. Introspectively, the interns analysed how different teaching styles productively fostered and fuelled collegiality. Colleen shared such an experience:

> It is interesting to work in such a close-knit team environment because I honestly feel as comfortable going to any of the other team members as I do to my own mentor teacher. They are very different. I know that Karen and Joanne have high expectations, are very organized, and really like structure. A lesson goes in a certain way, or else it doesn't go well. Maryann is really free spirited. Children paint anywhere in the room and experiment with paper airplanes in the room for the aviation unit. Other team members would never feel comfortable with those activities. And yet, they all respect each other's individual teaching styles. I think that's really powerful for tapping into each teacher's strengths. It builds friendships and collegiality. (Colleen, Interview, December 1999)

Interns looked to the mentor teams in their buildings as a support system for understanding and implementing the district's curriculum units. Caran believed that the collaboration she experienced while being part of a curriculum team shaped her understanding of how to find spaces to extend the curriculum. This was not without tension. While acknowledging ownership that experienced teachers feel toward curriculum content, Caran learned that asking questionings in constructive ways generated support for her efforts to deepen her children's understanding of particular curriculum issues. As she put it,

> Rather than stating that I do not see why we should only include such a homogeneous group of artists, I try to phrase questions that help my colleagues understand my point of view. Instead, I might say, 'How can we help our children to experience art and music in diverse ways?' I am learning skills that help me to negotiate with others who have more power than me. I want to find ways I can give myself space in my room to include a broader definition of an artist. I want to learn to ask questions that are in children's best interest. I do not intend my questioning to be solely a way for me to push my own agenda. (Interview, April 2000)

Conversations with various team members enabled this intern to generate appropriate and beneficial questions about the curriculum.

Kathryn, Caran, Colleen, and Diana negotiated how understanding the impact of teaming on children's learning melded with their beliefs about collaboration. "I am trying to work out how this makes me think about teaching with others next year. During my school experience teachers did not appear to share resources or ideas. This is very different for me. It can take a lot of time" (Kathryn,

Interview, April 2000). Through mimicking the role and responsibilities of a team member, Caran believed she "gained a much better understanding about how a team can work effectively to implement the curriculum units" (Interview, April 2000). At the same time, Diana sought "ways each teacher can do different tasks that work for the children in their room. This is important to me. I need space for my ideas" (Interview, December 1999). Colleen stated clearly that she did not "want to be teaching in the exact same way and the same content as the other third grade teachers" (Interview, December 1999).

Embedded in the premises of a PDS culture is the nurturing of communal responsibility for supporting an intern's learning to teach. The interns were encouraged by their classroom mentor teachers, PDAs and methods course instructors to observe and converse with other teachers in and across the elementary buildings. In such a community, the teachers openly recognize the strengths of their colleagues. Mentor teachers directed the interns to specific teachers who they believed possess special talents and would actively support the intern's sense making of teaching practices. Some of these teachers were responsible for a current intern. Others were not.

The interns also acknowledged the benefits in their daily teaching behaviour of watching other teachers. As she taught several math lessons, Caran described a dilemma and specific ways that witnessing another teacher helped her resolve it:

> I have two girls in fourth grade who always have the answers. I don't have any idea if anybody else is even with me. I've been saying this statement I heard my mentor use it. 'I want everyone who has an idea to put their hand up. I need to know that everybody's with me and really focused this morning and on task. I want to see more hands.' I wait until almost every hand is up. The other thing that I saw Christina [a first grade teacher] doing was taking lots of answers. She did not stop accepting answers at the first right one. She continued to say, 'Okay, what do you think? Okay, what do you think? Okay, what do you think?' She might have ten children all give the same answer. Not always. But it gives them, you know, the chance, and she knows that they all have it. I was using that technique yesterday in my math lesson. When we were practicing rounding as a group, some of the children who were really confused at the beginning seemed to understand better. (Interview, November 1999)

When it was established that one of the interns' beliefs about learning was incongruent with his mentor teacher's teaching style, Mark's mentor teacher encouraged him to observe the mentor teacher and intern team in the room next door. Mark described how his peer intern worked with a mentor teacher whom he considered "the Michael Jordan of teaching." Mark believed that this teacher "oozed greatness" as this excerpt from an interview illustrates:

> There are people that eat, sleep, and breathe something. That's why they're so good. I see her as a really effective teacher. I think that her relationships with the children are good. Seeing some of the things that they're doing gives me another angle for my learning. Also I'm learning through conversations with her and Anthea. (Mark, Interview, October 1999)

Mark watched this mentor teacher motivate children through the introductory part of a lesson. He was inspired by the way she drew out the children's ideas, fuelled them with gas, and encouraged them to ignite the lesson. He described his thinking as he watched her teach a lesson using maps with her 26

children:

> She gave the whole class the directions, and all of a sudden the ideas would erupt. I called it lift off power the other day. She has this way of drawing the children in. She presses send and it goes. She gets them thinking. She likes what she is doing. She uses her imagination to come up with activities such as working with Japanese teahouses. (Interview, October 1999)

Professional Development Associate(s) (PDAs) as Mentor(s)

In exploring the effects of the supervisor and cooperating teacher on student teachers in traditional preservice field experiences, researchers report contradictory findings. Some describe the impact of the supervisor as detrimental and suggest the removal of this role from the triad (Bowman, 1979). Other studies recognize the constructive character of this position and defend the traditional relationships, responsibilities, and rituals it perpetuates. Some researchers advocate the positive contributions that supervisors offer for shaping preservice teachers' field experiences (Zimpher, deVoss & Nott, 1980). Still others call for a clearer delineation of the roles of those who are directly responsible for student teachers (Emans, 1983; Grimmett & Ratzlaff, 1986; Zeichner & Teitelbaum, 1982).

Despite the lack of clarity regarding the roles, responsibilities, and rituals of the members of the student teaching triad, the research literature espouses the widely accepted premise that the cooperating teacher has greater influence on the student teacher than does the university supervisor (Boydell, 1986; Guyton & McIntyre, 1990). While this influence may be limited to teaching behaviour rather than to beliefs, attitudes, and philosophy (Metcalf, 1991), the fact that the preservice teacher spends the majority of the time with the cooperating teacher may well mean that this comes as no surprise. The data reveal five emergent themes that point sharply to the heightened role of the PDA in the supervisory process: readiness and relationships, assist versus assess, understanding children, collaborative dialogue, and individual supervisory needs.

Readiness and Relationship Building

In advocating a "democratization" of the student teaching experience, Gore (1991) points to a struggle between the cooperating teacher and the university supervisor as to who has more power over the student teacher, "who generally has no power whatsoever" (Ganser, 1996, p. 294). In Composing a Teaching Life, Vinz (1996) portrays the consequences of a hegemonic relationship between a cooperating teacher and the less experienced student teacher. The interns' portrayal of supervision in the PDS context acknowledges that a hierarchy of power exists – this will always be the case since the supervisor is ultimately responsible for the allocation of coursework grades and has overriding teaching experiences. Emerging from the interns' portrayal of supervision in the PDS context, however, are two ingredients that are missing from traditional student teacher supervision. First an extended period of time in which readiness building was very effective, and, second, the nurturing of intern-PDA relationships that developed in varying ways and depths over the internship year. When trust is the founding ingredient of this relationship, any prevailing struggle over the 'have' and 'have nots' of power seems to fade into a mutual synergism of advocating for the intern's professional growth.

During the first month of the internship each intern described how their respective PDA spent plenty of time in the classroom getting to know them, the mentor teacher, and the children. Sally described her PDA "coming in and joining in with the lessons. She spent time in our room getting to know the classroom routines and the children. I knew she would be there every day at some point."

Diana illustrated how Bettina acted like "one of the children. She sat on the floor, had a snack, and enjoyed a read aloud along with everyone else." Kathryn and Jayne allocated Bettina a role for morning meetings. To the children, Colleen and Mark described their PDA, James, as "another teacher in the room." It was not long before the children gave James jobs to do.

Diana described her relationships with the PDS university faculty as "nothing like she had ever had before with college professors." The relationships began as "one professional to another" (Interview, February 2000). While there was a hierarchical power structure, it was imbued with mutual respect and camaraderie. As the internship progressed, the relationships grew much deeper and moved from professional to collegial. Colleen expressed similar sentiment:

> We worked together to achieve a goal in a supportive community. I felt cared for, and valued as a person and an intern. Whether they were administrators, colleagues, children or parents, James [Colleen's PDA] modeled for me how to develop collegial reciprocity with mentor(s) who have more power. (Interview, February 2000)

As they begin to understand and value the opportunities to engage in extended conversations about learning to teach and the impact these had on self-analysis of their teaching practice, the interns constantly requested that their PDA be present in the classroom. While each PDA had at least five interns he/she was directly responsible for in as many as four elementary buildings (a drastic reduction compared to a traditional student supervision load), their having university responsibilities meant that the PDAs were not present in these buildings every school day. As interns and PDAs built trusting relationships, the interns expressed high expectations for their PDAs. Diana elaborated on her relationship with her PDA:

> I know my PDA has to be at the university some time, but I get impatient at times when she is not there to see what happens during a lesson. It is not because I am necessarily teaching and I want her to see everything that I do well. I want to share with her what is and isn't working. And, it's because I know she knows the children and is missing out on seeing their progress. My mentor teacher and I co-teach much of the time. When our PDA is there, she can take a center as well. Sometimes this means that I can see her teach, and I can also observe my mentor. Then we can all talk and share. I know this really helps me understand what I am doing and thinking. I ask them questions and they ask me. And, they ask each other questions. This usually happens at lunchtime or during a special. We never have enough time to talk as much as we would like too. I am envious when I know my PDA is in the building and she is not in my room! Other times I need her to help me figure out a problem. My mentor is teaching another center, so she cannot observe me. My PDA will help me co-teach sometimes. She will be there to support me when I get a mental blank in the middle of teaching a center. (Interview, February 2000)

While she described herself as outspoken, Colleen desired a relationship with her PDA that allowed her to talk freely about how she was feeling and what aspects of her learning really frustrated her. She had not experienced building such a relationship with any of her professors in her undergraduate courses. Initially, she believed that James [her PDA] was "a little taken aback by [her] complaining when [she] thought things were not working" (Interview, February 2000). Colleen explained to James that she felt that this was a sign of the developing trust in their relationship. As their relationship strengthened, Colleen continued to talk with James about dilemmas that bothered her. "He was very approachable and listened to what I had to say. He really sought out our opinions. My PDA created a relationship with me

where I am in a position to feel I can talk to him about exactly what's on my mind. We don't hold back very much when we talk" (Interview, June 2000). Colleen valued the professional relationship from which she sought her PDA's opinions and ideas. She viewed these supervisors as "friends and mentors." Later in the internship, she described her PDA as a colleague. "We've built this relationship that's one of mutual respect. I respect his ideas and he respects mine. This means that we can have conversations, not one-sided debates. We discuss whether or not an activity is developmentally appropriate for specific children. James knows the children in my room" (Interview, June 2000). About midway through the internship, Colleen noted that when a mentor teacher and intern 'live' together for a whole year and really get to know each other, they can no longer put on a daily 'performance" (Interview, February 2000). Consequently, tensions are bound to surface. She commented, "When I feel tension between my mentor teacher and I about my teaching, or when something happened at school or elsewhere, I feel I can talk with James or Bettina [another PDA] about those issues that are bothering me. I need to do this so I can focus back on the children in my room" (Interview, February 2000).

Assist versus Assess

One of the dilemmas inherent in the process of supervision in the PDS context for both the mentor(s) teacher and the PDA(s) is that of separating the functions of assisting and assessing. From the interns' perspective, it appears that a year-long internship offers a time frame in which to build trust and develop supportive relationships. This somewhat dispelled their concerns with assessing and focused the intern's supervisory needs on assisting.

As she described her PDA's role in the classroom, Diana alluded to the assisting relationship that Bettina had cultivated:

> It was not a relationship where she observes me, gives me feedback and leaves. When Bettina came into the classroom, I knew that she was there to support what we were doing. For example, if I was teaching a math lesson, she did the lesson with the children. She helped the children and added to conversations if Margaret and I were co-teaching. During math lessons, if there was a step I missed that would help the children understand the concept, she was there to cue me. This helped me understand how I should have done that or showed me something else to consider. It was not a relationship in which she was the person who gave me an A or a B or a C. Bettina was there to help me learn to teach. She did not judge me. I had to figure out what I needed to do and whether this worked for the children or not. I identified areas for her to give me feedback, not necessarily always after the lesson, but during it as well. (Diana, Interview, February 2000)

Likewise, Colleen considered James to be her colleague.

> Not necessarily an equal. I see him as a colleague much more so than a supervisor who only comes in one or two times a semester and is basing my grade on two lessons. If James had only see two of my lessons, it could have been win or lose. I mean, who knows how those would have gone? Some lessons go really well, others are okay, and some are disastrous. He sees a lot of lessons. He participates in a lot of lessons. He knows my mentor teacher. (Interview, February 2000)

When a PDA followed the clinical supervisory principle of 'fewness,' this intern was very receptive to this idea. Colleen continued her portrayal of the supervisory process:

> By picking one or two things at a time to work on in my practice, I didn't feel overwhelmed. My self-esteem is really important. My PDA helped me to recognize what I do well. When we pointed to one or two aspects to work on, I feel as if I have reachable goals. If there are too many things to work on, there's no way that I can do it. (Interview, February 2000)

As a PDA labeled aspects of her classroom practice, Colleen made connections between her personal theories of teaching, research, and practice.

> James gave me a language to use. I had some of the words but didn't understand what these meant until he pointed out examples in my teaching. For instance, if I'm doing a story with the children I will talk with them about it. We'll do it together, and then they'll finish it on their own. James described this as 'scaffolding.' Another example was 'removing a seductive object.' We have been bombarded by theory. Now this internship is a time for us to practice that theory. I think sometimes I forget or don't realize. Sometimes I think that theory was a big waste of time. Now I'm realizing that I'm actually practicing these things that I learned. There is beginning to be a connection between the theory and practice that I really didn't think ever existed. More importantly, I am beginning to figure out my practical philosophy - what I believe about children, learning and teaching. (Interview, February 2000)

As individually needed, a PDA gave specific feedback to the intern about their teaching practice and about building relationships with a mentor teacher. "James talked with me about varying styles of teaching that allowed me to differently interpret my mentor teacher's classroom behavior." When a PDA spends a considerable amount of time in a classroom, he gets more than a snapshot of the way mentor teachers model their understanding of teaching principles. In this way, a PDA can also facilitate and redirect an intern's interpretation of a teaching and learning principle. While Colleen implemented an activity based on the principles of cooperative learning, there appeared to be gaps in her understanding of the process in its entirety.

> The other day, I structured a cooperative learning activity and gave children jobs. There were three children in a group. I changed the groups so they were not working with the ones they usually sit with. I wrote three jobs up on the board and then I dealt out three cards to each group. I told the children that the lowest number would be the artist, and the middle number would be the manager, who has to make sure that the group has all their supplies and that they are on task. The highest number would be the note taker, the person who writes out the plan before they do their story journey map. Afterwards, the children filled out a reflection sheet with questions about how they worked with their groups. Was I cooperating? Was I doing my job? Were we respecting all ideas? Were we on task? The children also had to rate themselves. Afterwards, James told me he really liked the way I designed the activity. He told me my activity was based on the principles of cooperative learning. I didn't really realize the components that make up cooperative learning. He talked about face-to-face interaction, interdependence, and individual accountability. He gave examples of how I did each of these in the various part of the lesson. (Interview, February 2000)

Colleen recognized that in her teaching practice there is often a mismatch between her thinking and doing.

Kathryn's teacher inquiry project focused on her science teaching practice. As she looked for evidence that supported her wonderings about how children used the science table in her classroom, Kathryn asked her PDA to collect data. Kathryn generated a chart for Bettina to collate information about which children visited the science table. Kathryn instructed her PDA to record the children's names and snippets of the children's conversation whilst interacting at the table.

> I was interested in finding out how effective the tasks at the science table were for probing the children's thinking about sound. I was concerned that the children were playing with the objects, but not using scientific inquiry. Bettina and I talked about what children playing would look and sound like and what children learning would look like. After she collected the data, I looked for patterns across the children's conversations. The next day, Bettina again collected data for me to analyze. From the first set of data I noticed several similar thoughts from the children about how vibrations move through water. Jayne, Bettina and I talked about how I could talk with the children about this at the science table in order to find out more about their thinking. Before Bettina collected the data, my initial concern was that the children would only play at the science table and not focus on the results of doing the tasks. As I looked over the children's comments, I learned that what I consider to be play is the process a first grader uses to engage in scientific inquiry. I realized how my adult thinking was interfering with my understanding about how children think and learn. Bettina helped me to listen to the children's thinking. (Interview, April 2000)

Supporting Children's Learning

Intern and PDA are there for the child, which is different from traditional student teaching, where the student teacher usually sees the supervisor as present for the preservice teacher, not for the children. The interns in the PDS recognized the contribution that the PDAs offered – their expertise is valued and accessed. In PDS work, the intern sees the impact of the PDA on the children in the classroom. In traditional student teaching this dynamic does not present itself for the recognition or determination by the preservice teacher.

When a PDA develops relationships with children in an intern's classroom, intern-PDA conversations focus on matching children's learning styles and a teacher's thinking and behaviour. For example, Colleen described an incident in her teaching where she permitted a student to hand in a piece of work even though it did not meet the expectations she had set. James asked her "why she did that." Since she knew that James understood Craig's learning style, Colleen explained why on this particular occasion she had allowed him to do this. While setting high expectations for all the students, Colleen recognized that Craig "was not doing his best work. He was totally frustrated." James and Colleen brainstormed the ways a teacher can help children when they reach such a point of giving up on a task. Colleen felt "she could not have shared such a conversation with a traditional supervisor. They do not know the children" (Interview, June 2000).

The children recognize the PDA as another teacher who can guide them. "The children know James. And, he knows their names – they love that. The children are comfortable with him. He knows which children will need help. When I set a task that requires the children to write reflective questions, he goes over to a child he knows is going to have a hard time with that task. He'll stand by them and

encourage them. He says, "Okay, now you have that down, what do you think you need to put next?' He is modeling for me the types of conversations I need to have with children" (Interview, May 2000). Colleen expressed how knowing James' relationship with the children meant that their intern-PDA conversations were much more meaningful for her understanding of her teaching choices.

As the interns struggled to understand children's conceptual knowledge, intern-PDA talk focused on helping the interns understand their own content knowledge. On one occasion in March when Mark was planning a unit based on electricity, Mark and James shared what each considered their definition of energy. Through selecting individual children in Mark's classroom and discussing how they thought that a particular child would understand energy, Mark was helped to devise concrete examples for his lessons. "I (Mark) was thinking more of energy in terms of a definition for the unit. But when James pointed out to me that most of my children did not think of energy as an abstract term, I reconsidered how else I could help them to understand. James was looking at energy as though he had a picture in his head, a mental image of this. What would energy look like for a child?"

Kathryn described her PDA as someone with whom she felt she could discuss any aspect about a particular child's learning.

> Bettina is in my room so often that she really knows the child. Sometimes I am not sure if the way I am interpreting a child's understanding is right or not. I ask Bettina to do a similar activity with that child, and then we discuss what we each though about his conceptual understanding. I am getting much more skilled and more confident about diagnosing a child's understanding of a math concept. (Interview, February 2000)

Collaborative Dialogue

Sharing conversations that focused on classroom experience allowed interns "to claim a knowledge base from which they could speak. Coming to voice is not just the act of telling one's experience. It is using that telling strategically - to come to voice so that you can also speak freely" (bell hooks, 1994, p. 148). When she voiced perspectives on her immediate and daily dilemmas with her mentor teacher and PDA, Diana established a pedagogical foundation from which she framed her teacher identity.

> When the three of us talk together after school, I feel that I am able to listen to the specific feedback you give me. I am comfortable knowing that I am 'allowed' to interpret this from my perspective. Because you both know the children in our room, I can take my stories and examples to a different level of explanation. This helps me figure out why the children behave as they do and how I can change my behavior in the classroom. I can share my ideas for lessons and activities to make sure that these are appropriate for my children's learning. I couldn't do that if you were not here so often to get to know the children and me. At the same time, I can tell you both what I understand an instructional practice to be, and you can help me to make sense of what they could look like for these children. I am much better able to do that through conversations than through trying to make sense of class notes later on when I am on my own. (Diana, Interview, April 2000)

About the middle of the internship year, Sally gave her insights into the nature and value of sharing conversations about her teaching:

> I now can see the difference between teaching conceptually and teaching procedurally. But I have to work out which child needs which part of that concept at what point. Then, what comes next for that child? By sharing conversations with my PDA and mentor teacher that are about our observations after the lesson, or sometimes during the lesson, I am helped to better understand what the children are getting or not getting. I feel as though talk enables me to better understand concepts than just reading them from a trip sheet of written feedback. So what I do is this. I listen to our conversations we share, then I go home and look over the trip sheet to see what sense I make of that. I scribble questions – sometimes I email them to Bettina. Next time we are together, usually the next day, we talk about my questions and related thinking. I find this very helpful for planning the next lessons. (Interview, May 2000)

In describing the process her PDA followed for the post conferences, Colleen highlighted collaborative conversation based on questions that James asked her:

> Why did you decide to do it this way? Did I think that was developmentally appropriate? What did I notice about this part of the lesson? I do not get the sense that it is being evaluated for a grade as much as we collaboratively analyzed my practice. James gave me data to help me figure out who was off-task. As we looked at the data together, he gave me ideas about how to better manage the class for this particular task. I noticed patterns of children's behavior that I did not see during the lesson. We brainstormed ways for me to think about pulling specific children back into the lessons. Our conversation gave me the voice to identify my management strengths and those areas that I could focus on. (Interview, February 2000)

Meeting Individual Intern Supervisory Needs

When they recognized that learning to teach means individual progress, the interns identified the strengths of particular PDAs and made good use of these. The interns recognized James as offering expertise in issues of classroom management, Lynda in reading, Bettina in integrating technology into lessons and math, and Denise in helping develop the interns' questioning skills and thinking about different ways to extend content in curriculum units. The interns felt comfortable inviting any one of these PDAs into their classrooms to collect data and give them feedback about the content-related or pedagogical practice. This happened on multiple occasions. Although Bettina was not her 'assigned' PDA, Caran wanted some guidance for beginning a series of math lessons with her fourth graders.

> Bettina is not my direct PDA, but I know she has expertise in technology and math. I asked her to observe a lesson I was teaching about long division. I needed to assess the children's prior understanding of this concept. My hunch was that they understood the algorithm, but did not have the conceptual understanding. I gave the children several activities. Bettina and I observed, and listened to their conversations. After the lesson we talked about where we each thought the children's understandings were. Since she knows the children, we focused on each individual. Then I suggested some ideas about planning for the next few lessons. We agreed that she would observe again after a couple of lessons. This way we could put our thoughts together about what the children then understood conceptually about long division. I also needed to know when to stop pushing the conceptual understanding and move to doing the algorithm. I knew this would be a dilemma for me. (Interview, December 1999)

The individual nature of learning to teach has consequences for supervision. When interns identify their supervisory needs, a PDA has to be prepared to give varying amounts of time not only to each intern, but also to various parts of the supervision cycle. Intern ownership of this process assists the PDA to decide which role s/he plays. For example, in the middle of the internship, Diana needed time to talk about the concerns she was experiencing with planning lessons. By this time, she felt comfortable getting feedback from and co-reflecting with her mentor teacher, but she needed more guidance for talking through each lesson. Pre-conferences required more time. On two occasions, the intern, mentor, and PDA planned together. In trying to construct three consecutive lessons that integrated scientific inquiry, centers, and technology,

> my PDA and I brainstormed ideas. We thought through an approach that would be more appropriate for the children. I understood why this approach was better than what I had originally written. Clearly, this helped me devise the direction that I should take to meet the goals of my lesson. (Diana, Interview, February 2000)

Methods Course Instructors

Both general principles and methods of teaching as well as content-specific principles and methods of teaching should be attended to during the supervisory process. A premise of the argument of this paper lies in the researcher's conceptualization of supervision as a function of the teacher education program's goals, or as a process, rather than a role assigned to any one particular person. However, within this communal process, roles emerge whose functions overlap. Since there are multiple supervisors in the PDS context, many roles are part of the process of supervision. Some roles relate to content-specific aspects of the learning to teach and teaching to learn process.

The methods course instructors played two key mentoring roles throughout the year-long internship. First, they assisted in the interns' learning of the subject matter, and second, they nurtured the interns' pedagogical understanding of learning to teach the curriculum content. Although the methods courses were officially completed by the first week in February, the course instructors continued to play an active supervisory role in the interns' and mentors' classrooms. Through the latter stages of the internship, the methods course instructors guided interns and mentors who designed inquiry projects that focused on questioning in one of the content areas.

While the interns acknowledged the ideas they inherited from their teachers, it was not until their concrete classroom experiences gave them a foundation to make sense of their teaching practice. Colleen described the main ideas she gleaned from the math methods course in Rod's [mathematics methods instructor] discussion about the triangle in teaching and learning which he drew that on the board one day during class. Colleen reported this as the most powerful connection between her learning, reading, the methods courses, and her reflection.

> The first vertex of the triangle represents knowing the children in my class and where they are, what they know, and what they don't know. The second is figuring out what they need to know, and the third, is creating that helps the teacher meet the children's needs through teaching the content. These vertices are interdependent. (Interview, December 1999)

During the following months, conversations among interns, PDAs, and methods course instructors focused on this triangle of learning. It became a unifying thread that the interns constantly referred to in

assessing their teaching practice.

The interns and mentor teachers invited the methods course instructors into their classrooms to co-plan and co-teach lessons. Over the course of the internship, Colleen and Karen felt somewhat bombarded by the idea of 'inquiry.' For Colleen, every course in the last year promoted the idea of student-led instruction based on student questions. Throughout the last few months, she struggled with the practicality of inquiry. Colleen asked, "How do I give up all that control and put it in the hands of eight-year-olds? How can I ensure that the students will ask the "right" questions? How can I ensure that we will be addressing standards when we inquire into student questions?" All of these questions permeated her thinking. In her words, "I had formed a rather pessimistic view of inquiry." Colleen relates her co-planning and co-teaching experience with Christa [science methods instructor]:

> I was disappointed in my attitude toward a practice that I knew little about. For that reason, we invited Christa into our classroom to co-teach an air and aviation lesson in an inquiry-based method. We wanted to understand how inquiry played out in a real classroom. Christa and I prepared a lesson in which the students actively engaged and asked questions. Our goal for the children was: to develop an understanding that air takes up space and moving air can do work. The students would test to see if they could lift objects, such as a person, and a heavy book, and to assess the strength of air. It was incredible to see the excitement and enthusiasm in the students. They were involved and intrigued. It was really hard to stop the science lesson in the end. The planned activities enhanced a strong understanding of the objectives of the lesson. The children drew conclusions from the experiment, and offered evidence to support their claims.
> One of the students offered the conclusion "air takes up space." He defended his claim by relating it to an experiment he had seen on TV: submerging a cup, with a napkin in it, upside down in water, and the napkin remained dry. This is inquiry! He was able to link what he learned on that day to something he had seen before. (Colleen, Journal entry, December 1999)

In this example, the methods course instructor mentored through modeling the planning and enactment of the lesson, co-taught in the context of the intern's classroom, and, afterwards, evaluated the lesson in a post-conference with the intern. As she reflected on her learning, Colleen analyzed her beliefs about inquiry, identified the misunderstanding she had about the inquiry process, and emphasized the impact of Christa's mentoring. She said,

> Inquiry doesn't mean that I as a teacher must give up all control in the classroom. It is necessary for the teacher to realize his or her comfort level in the classroom. I see guided inquiry as a very realistic and beneficial method for teaching so that the students learn through active involvement and enthusiasm for the subject.
>
> When Christa taught with me in my room with my children whom I know, I could make much better sense of the children's learning and my practice. (Journal entry, December 1999)

When the methods course instructor received feedback from the interns about their struggles to fit the course requirements into their teaching practice and the context of their classrooms, Christa reconstructed the syllabus for the second part of the semester. Diana proposed,

> It was as though she looked at Rod's triangle, and figured out what we were struggling with, what we knew, and what we needed to know. She listened to our concerns, saw our needs, and redesigned the tasks to fit our individual learning and the contexts in which we were learning to teach. Christa was better able to mentor us individually. I feel like our voices are heard in the internship. This impacts the way I teach. I can see how I appreciate having my voice heard as a student. If a child in my classroom raises their hand with a suggestion, I listen to what they have to say. I let them make choices about what they want to do. I understand how comfortable I feel in this methods class and how motivated I am about learning. What a powerful way to foster learning in my classroom. (Interview, December 1999)

Another example of mentoring by a course instructor illustrates how Kathryn's individual needs were met:

> I met with Christa to talk about science. She came to our school and had us sign up for times to meet with her. This was a good plan for a couple of reasons. First, we didn't have to try to find a time out of school hours to meet with her. This gave us a half hour to touch base with our concerns and get some individual attention. Second, by her having a variety of times to choose from, we were able to schedule around times when we would really have to be in the classroom. I worked with her during snack time. Christa and I talked about a lot of things. Having the one-on-one attention made me feel less rushed to get my ideas across. This freed me to talk. She scheduled these times weekly. I think having the methods instructor to work one on one with the interns is extremely important. (Interview, February 2000)

Kathryn believed that this mentoring allowed "personal questions in the context of [her] classrooms and curriculum units" to be answered. She premised, "Isn't that what we as teachers are supposed to do with our students when we conference with them?" (Interview, February 2000)

In summary, this section of the findings depicts a contextual process of formal preservice teacher supervision that heralds a new paradigm in supervision. Interns' images of mentor teacher supervision shift from the traditional student teaching pair, with its hierarchical decision-making structure, to a "dynamic duo" of classroom teachers in which trusting and collegial relationships are nurtured and shared decision-making is supported. Within this supervisory relationship, mentor teacher and intern mutually recognize each other as a 'growing professional.' They tap each other's unique expertise for the benefit of their students' learning. While fostering the individualized nature of learning to teach, this new model of the supervisory relationship affords spaces for both the intern and the mentor teacher to explore and change their classroom practices.

Throughout the internship year, the PDS interns addressed the heightened role of the university supervisor. The interns highlighted the value of an extended period of readiness and relationship building with an emphasis on developing mutual respect as a factor that contributed to emerging collegial relationships between interns and PDAs. The PDS interns' long-term exposure to the assisting functions of mentoring relationships with classroom teachers and PDAs facilitated a formative supervisory approach. The PDS interns' conception of supervision shifted from that of a role delineated by exclusive experts and an evaluative end-product to that of a formative process of collaborative and reciprocal learning and teaching. The individual nature of learning to teach has consequences for supervision. When interns identify their supervisory needs, a PDA must be prepared to give varying amounts of time, not

only to each intern but also to various parts of the supervision cycle.

While they viewed their mentor teacher(s), PDA(s), and methods course instructors as important facilitators of their formal supervisory experiences, the PDS interns emphasized informal aspects of the mentoring process. The second section of the findings captures how these preservice teachers made sense of the informal supervisory practices offered by other members of the PDS community.

Informal Supervision

The data analysis (see Table 2) revealed multiple mentors who shaped the informal supervisory experience of the interns over the course of the PDS internship. Informal supervisory practices included self-monitoring through reflective journaling and thinking, and receiving feedback from the on-going conversations and interactions with children, parents, peer interns, administrators, curriculum specialists, and building professionals.

Table 2
Emergent Themes: Informal Process of Supervision

Themes	Sub-themes
1. Self as mentor	• journal writer • lesson planner through mental rehearsal • goal-setter • reader • self expectations
2. Children as mentors	• The interns' relationships with the children • Conversations with children • Examining students' work
3. Peer interns as mentors	• Peer interns • Special peer interns • Intern building meetings
4. Other professionals as mentors	• Principal • Classroom paraprofessional • Building professionals • District curriculum coordinators
5. Parents as mentors	

Self as Mentor

Journal Writer

The interns were expected to write two to three journal entries each week for the internship year and submit these to their PDA. Informal discussions generated verbal feedback and written responses were returned to the intern. As they reflected in their weekly journals, several interns indicated that their mistakes were a source of learning and self-monitoring. Caran evaluated making mistakes as a way to assess her growth. "That's what my mentors want me to do. I try out ideas. I feel comfortable saying,

'That was horrible, I've learned what not to do. Or, that was really good.' I must remember to do that more." She continued,

> I don't think the children understood population density. If I explained that again, I'd probably use different words, and have a visual for them to look at. I don't think I should asked them to bring their papers up to the rug because they made tunnels out of them instead of listening. I should have collected them and held those. Thinking about those issues helped. (Journal entry, October 1999)

Caran's statement reflected her mentor teacher's support and her own confidence as she acknowledged, "That wasn't a major disaster, but I shouldn't do that next time. I was not hindering children's learning. I figured out some ways that were not as successful as others."

Diana used her journal writing to portray how she changed her teaching practice over the course of a series of math lessons. This excerpt shows that she "learned as much as the children did:"

> The first center I ever organized was a real experiment. I was learning about how the children would behave and demonstrate their knowledge. I did that lesson four different times and each time I did it differently I thought of different ways to ask questions about their knowledge. The first day, I had my objectives and the steps that I thought I would need to do. The first object was to make a triangle. We used plastic straws for the sides and play dough balls for the corners. I instructed the children to make a triangle. We had not reviewed what a triangle was. I didn't know at that point whether they knew what a triangle was or not. I let the hands-on-activity be the way to test their knowledge. By Tuesday morning, I started the lesson with flashcards with a shape. The children told me the name of the shape. I tested their prior knowledge before we did the hands-on-activity. We talked about what a side is, what a corner is, and what objects look like with this shape. By Thursday, we discussed how many sides and how many corners a square has before we constructed it. (Journal entry, September 1999)

Diana alluded to how "trying it can be when you put all this work into getting prepared." She added.

> I have learned how talking through a lesson pretending to be a six-year-old, and doing it myself can really help me work out some of the glitches before the lesson takes place. I really need to rethink this and make improvements. (Journal entry, October 1999)

As he struggled to understand his role as a learner and his role as a teacher, Mark became "more introspective" (Interview, October 1999). He found this process to be mentally and emotionally draining, but an essential undertaking for him to figure out his teacher identity. While he described it as "acclimating to my own mind" (Interview, October 1999), Mark told himself constantly that he needed to feel comfortable with "thinking deeply." For him, this was "not always the most easy and carefree way to be" (Interview, October 1999).

Similarly, as Mark tried to let his mentor teacher know of his frustrations with not understanding some of her directions, he needed practice saying aloud the words before he could confidently and appropriately put them into practice in the classroom. As he left his meeting with his PDA, Mark had in mind the phrases he wanted to say. While he felt confident that he had a plan, Mark was not sure when he would need to put this into action. He practiced at home. Consequently, when the moment appeared,

Mark delivered his 'I message' in a professional manner. He felt relieved that his self-mentoring helped open up the communication channel. The outcome was a giant leap forward in their teaching relationship.

Lesson Planner Through Mental Rehearsal

When describing the planning process she engaged in, Caran alluded to the vital role that mental rehearsal plays in monitoring her teaching practice. As she planned for science and social studies lessons, she spent considerable time researching the topic, writing a detailed lesson plan, and then practicing. During each step, she constantly asked herself questions and put herself in the role of different children in her class. 'Is this task developmentally appropriate for Peter? How might Susan attempt this? Will Lyle understand the meaning of these words?' When she planned to teach, she "usually sat in [her] room and talked to [her]self," adding, "I practiced the words that I used in the lesson." She needed to test different ways of expressing herself and determine what sounded most concise and clear. "Often as I practiced, I realised that what I was saying was not clear. I made changes and practiced again." While she may stray from this dialogue as she teaches the lesson, many of the words "are exactly those that I practiced the night before" (Interview, December 1999).

Caran often wondered if other beginning teachers use the same practice before teaching. She also thought about the fact that experienced teachers must not do this. "I know my mentor teacher cannot spend this much time preparing for each lesson or they would never get sleep." Her mentor teacher explained to Caran that she does some practicing as she drives to work. Caran recognized that as she continued to practice and teach, she would probably not rely on "my nightly monologues as much" (Journal entry, November 1999). Caran looked forward to the time when she could figure out how this comes more naturally. "For now, I find this a mystery!" (Journal entry, November 1999).

Goal Setter

During the internship, an intern leads three goal-setting conferences in the presence of a mentor teacher and PDA. The purpose of these triad gatherings is to assess the intern's progress to date with meeting the previously set goals, to extend and revise these goals, and to look at ways an intern can demonstrate how these goals are being met. These gatherings support the intern's professional growth and facilitate communication among all three members.

Through a process of professional goal-setting, the interns learned to view and value themselves as risk-takers. Towards the middle of her internship, Colleen knew that accepting more classroom responsibilities meant facing more risks. Despite her fears of opening herself to criticism, she set as one of her four goals, "more risk-taking" (Individual Intern Plan, November, 1999). Colleen recognized the support offered by her mentor teacher, PDA(s), and methods course instructor. The following excerpt gives the reader some 'up-close and personal' insights into Colleen's lived experience of one her risk-taking episodes. Through analyzing her risk-taking and interpretation of feedback from her peers, Colleen exposed the power of her self-mentoring:

> Christa, our science education professor, asked if I would play my videotape of the lesson that Karen and I co-taught. I was horrified! How could I allow fifteen other interns to watch me teach one of my first whole-group lessons? What would they think? There was no way I could put myself in that position! Not only did I feel I made mistakes during the lesson, but I dislike listening to my voice on tape. I am not too comfortable with myself as a teacher to allow others to watch me. However, I decided that this would be the first step in taking risks. I felt really good about the overall outcome of the lesson, with the

> exception of a few fumbles, I was proud of how I did. I was not sure how I would feel as others watched it.
>
> When the time came to view my tape, I doubted my decision. I wanted to back out, but Christa organized to use the tape to establish guidelines for reflecting on our teaching. At first, I looked around the room at my peers to watch their reactions. I was extremely embarrassed. I wanted to go inside their heads to know what they were thinking, but I sat as calmly as I could. I kept thinking, "They're in the same boat as I am, and they make as many mistakes." Then came the worst part: getting feedback from the class.
>
> As I was not sure how I was going to handle criticism, I sat vulnerable to the interns' remarks. Most of the comments were positive. I was pleased that they addressed the students' behavior and my management skills. For the most part, I was pleased with myself for showing my videotape, and I was proud that I had enough guts to do this seeing that others had already refused. I am attempting to face my fears and take more risks, though this is not an easy thing to do at all! (Journal entry, November 1999)

Diana established as one of her goals "becoming familiar with and teaching with the national and state standards for the content areas" (Individual Intern Plan, February 2000). Most importantly, she wanted to make sure that "she knew how to figure out what the standards are, and what these mean for how and what she teaches" (Diana, Interview, February, 2000). Diana provided journal and lesson plan evidence at each conference about her progress towards meeting this goal.

Reader

The interns stressed that their professional reading provided resources for understanding how different teaching styles, children, and contexts interacted. Colleen was not sure how the writer's workshop would best work in her classroom. She read three books about writer's workshops and concluded,

> I have yet to know what my writer's workshop will end up looking like. I read books people suggest. Sometimes I go the bookstore and look through every educational book to pick the next one that I'd like to read. I want to read as much as I can and work through the information to figure out if it might work for me, and how to make changes to it. (Colleen, Interview, February 2000)

The interns asked their mentor teachers about books that would be good resources. They also questioned the PDAs who the interns knew had a particular interest or expertise.

At the end of the internship, Kathryn stressed the impact of reading books and articles, and searching professional journals on her inquiry:

> When I was trying to make sense of the data I collected for my inquiry project, my PDA suggested that I reread some articles. As I did so, patterns formed in my head. I was finally able to understand what the children were telling me about their science experiences. I shared these articles with my mentor teacher and other interns. I found several of the journals on-line. I have bookmarked these for further use. It feels really good to want to read good articles and find books. (Interview, June 2000)

Self Expectations

These six interns described themselves as high achievers. They set very high expectations of themselves and others. At times they placed an intense amount of pressure on themselves to get tasks completed in a set amount of time. Balancing self-reliance with collegial support was an on-going trial and tribulation. Mark knew that it took huge commitment and energy to be in the classroom. He wanted to learn from a mentor teacher who would show him how to be an excellent teacher. Slowly, he realised that part of his learning to be a teacher involved growing from the inside, not solely being nurtured from the outside. As he pounded his chest and stated, "Grow, darn it, grow!" he acknowledged the role his expectations played in mentoring not only his desire to learn, but his learning to teach.

Children as Mentors

Although improving student achievement is an outcome embedded in almost all PDS partnership goals, only a smattering of studies address the impact 'on' or 'of' children as active participants in the PDS community (Dana & Silva, 1998; Knight, Wiseman, & Cooner, 2000; Pechman, 1992).

Patterns in the data revealed that the interns' students had an informal supervisory effect on their teaching by three important means. First, the trusting relationships built between the children and the intern were a medium through which the children mentored the intern. Second, classroom interactions between the intern and the students provided direct instructional feedback for the interns to use for analysing their teaching practice. Third, as they examined their students' work, the interns reflected on their beliefs about children's learning and their own teaching practice.

The Interns' Relationships with the Children

Being part of a PDS context over the course of a year fostered relationships between the interns and the children in their classrooms over an extended period of time. The interns benefited from witnessing the children's academic and social development over this extended period. Building trusting relationships with the children was crucial for both the children and the interns' learning. Trusting relationships fostered the intern's confidence to open up their lessons to critique by the children. When the interns gave the children the opportunity to give feedback as to what they had learned during a lesson, those who acted on this feedback made changes to their next lesson. At the end of a science lesson that focused on plant growth, Diana asked the children, "What did you learn from the lesson today?" When one child responded, "It was so long, I've forgotten," Diana, who graciously accepted the comment, knew it was an opportunity to rethink the next day's lesson. In conversation with her PDA afterwards, she acknowledged the trusting relationship between herself and the children that allowed her to accept their valid criticism. "When the children give me honest hints like that, I know it is time for a change."

As their relationships with the children intensified, the interns experienced the benefits of co-planning with their students. When they began to value the children's ideas, the interns were amazed by the feedback they received from their children. The excerpt below illustrates the power of children's mentoring as the children asked questions of the interns during instructional lessons. Caran learned to trust the children's judgment about what they knew and needed to know and how they wanted to go about learning things. By her way of thinking, Caran's understanding that children could devise their own science experiment came about by a leap of faith. She combined a learning centre and a co-teaching experience, with the help of her mentor, into an experiment that took several lessons. These grew out of a question the children had about evaporation. As Caran, recounted:

While we were doing a different experiment earlier, the children asked some questions

> about evaporation. Why does water evaporate? Our children are very good at asking questions. This lesson was more like a discussion. We reviewed the experiment that was connected with evaporation. One child asked, 'Where does the water go and why?' I asked them to help me design an experiment where we could test what happened when water is left out in the air. The children came up with the steps we should take to find out. It was amazing. I planned what my ideas were for the experiment beforehand. Then the children came up with very similar ones. (Interview, November 1999)

Conversations with Children

When the interns could conceptualize their students as informal supervisors, their conversations and interactions with the children enabled them to deliberately and systematically 'see' learning from the children's perspectives. Caran's experience with Kevin and modelling her students' interaction with him in her class illustrates the mentoring role that children can play. However, the intern must be consciously aware of and receptive to this feedback. When the interns ignored direct feedback from the children, they needed guidance from either a mentor teacher or a PDA to evaluate the incident and make changes to their practice. Dialectic questioning between the mentors assisted the interns in this process.

To understand the process of mentoring that emerged from interactions between the interns and children in a PDS context, I used dialogic interpretation. When children give verbal feedback to their intern teachers, how do the interns make sense of it? What is the impact on the interns' thinking and instructional behaviour? How do the interactions between an intern and a child/ children affect the interns' teaching practice and student outcomes?

As the interns actively listened to the direct feedback they received from the children during instruction, they changed the course of a lesson. Also, the interns learned to recognize the children's body language. When the intern acted on such mentoring cues and made an adjustment in her/ his lesson, the children were able to focus for longer periods of time. As she reminded herself to "[pay] attention to the children's messages," Diana assessed her understanding of her children's classroom behaviour. "When they start to wriggle on the rug, I know it is time to change. What is hard to decide is whether or not they have sat for long enough or if it is one of those times when even six minutes is too long."

As she reflected-in-action (Schon, 1983) during an introductory lesson for the Pioneers unit, Diana later explained how her students

> gave the best feedback about what I was doing. For example, with the letter I used in a lesson about becoming pioneers. By looking at their faces, I saw that they were worried and scared. I needed to adjust my explanation. They gave me immediate feedback of what I needed to say and what needed to be done. (Interview, December 1999)

Once the interns realised that their children's feedback is not deliberately given to hurt their feelings, they can look with new eyes and reflect with a 'fresh interpretation' (Rosenholtz, 1989) on aspects of their practice that children identify as being confusing. Colleen described her children as very direct in their approach when they do not understand a direction or a concept:

> Our kids are very open about saying, I don't understand at all what you're saying. I don't understand what you just did. They strongly voice their confusion and use body language to show me that they don't understand. At this point, I step back, re-think, and try to re-

> word. I take this as an indication of the depth of our relationship. They want to learn. They are not setting me up to fail in my teaching. (Interview, February 2000)

Colleen also recognized "the other end of the spectrum" as she saw the children's enthusiasm when they were intrigued by a concept. "During DPA, some were still talking about a story we read an hour ago and making predictions. Obviously they were really thinking about it. Analysing their positive feedback gives me ideas about their motivation. It tells me this is a meaningful and exciting task. I need to do more of this."

In this excerpt, Diana acknowledged the importance of understanding issues that children and teachers were dealing with that affect and direct their lives. This assisted her in analysing a pattern of interactions with a particular child and recognizing the significance of one-on-one responses for both the child and herself. Diana shared her personal connection with one of her students that was important for both of them:

> In order to be a really good teacher, I have to know a lot about children. It's more than knowing how they develop physically. It's figuring out how to reach out to help a child. Teachers have to know how to handle situations when there are things going on in a child's life that affects his or her progress at school. Becoming sensitive to the warning signs is challenging. We have a child in our classroom whose Dad has cancer. He and his brother have been living with friends of the family for about six weeks. It's really scary for him not having his Mom or Dad. He knows if he gets sick, he cannot see his Dad. He's been having so many emotions. It takes a lot to know how to handle that and to figure out what's best for that child. Sometimes, he tells me that he really needs to cry. I let him cry. Other times, I try to get his mind off it and involve him in another project. Peter knows my mom has cancer. At times, I feel he is trying to model for me how I can deal with it. He wants to make me feel better, too. It's as though he is saying to me, if you let me cry, then it is okay to let yourself cry as well. So, on my own, I cry too. And, I do feel better. (Interview, December 1999)

While inquiring into how children learn in cooperative learning groups, Mark received a note from a child who requested, "Would you please help me work better in a group?" Through his PDA's modeling of supervisory conversations, Mark asked the student, "Can you pinpoint one aspect you would like me to concentrate on?" The child responded that he wanted Mark to watch him in a group and look for when he interrupted. Mark asked the child to describe what they would sound and look like. After this fourth grader gave him some descriptors, Mark collected data for the student to look at. Together they noted a reduction in the number of times the student interrupted and noticed a great improvement in his listening skills. This student guided Mark to connect the supervisory practices he had experienced with his PDA with a process that Mark could use for helping the child enhance his social skills.

Examining Students' Work

At the beginning of the internship, the interns spent time trying to get to know the children in their classroom by looking over the work they did. Sally believed that this "assisted her to generate conversations with the children about their differing interests." The interns began to understand what was expected of children at the various grade levels and what were developmentally appropriate activities.

As they assumed increasing teaching responsibilities, the interns realised the significance in terms

of formally and informally assessing students' work. While focusing on children's understanding of writing paragraphs, Sally spent many hours reading through fifth graders' writing journals and giving them individual feedback. When she looked across the children's work, Sally detected patterns revealing that the children did not understand how to sequence paragraphs. Consequently, she devised two mini-lessons that emphasized this skill. Sally, Colleen, and Caran designated times when their classes could brainstorm ideas to construct rubrics for assessing pieces of student work. The interns valued the ownership that their students felt about this process.

Peer Interns as Mentors

Peer Interns

Critical thinkers who want to change their teaching practices collaborate with one another through discussions that cross boundaries and create space for interaction. It is fashionable in the scholarly literature to write about 'hybridity" and 'border crossings' but a rarity to find a reference to actual conversations taking place in a preservice field practicum. To engage in dialogue is one of the simplest ways that interns can begin to understand and question their professional practices, to cross boundaries, as beginning teachers, scholars, and critical thinkers (bell hooks, 1994). Within the spaces of critical collegial friendships, interns push the boundaries of what they know, and in the process, expand each other's ideas. Reflecting, listening, reframing, and questioning are crucial components of their teacher preparation.

Furthermore, such opportunities for dialogue offer members access to multiple perspectives and critical reflection, naming beliefs and challenging assumptions, through a process of questioning "taken for granteds" (Louden, 1992, p. 182). The interns in this study believed that the strong relationships they developed with other interns substantially contributed to their supervisory support. Diana felt that she had 27 other people that she could share and "bounce" ideas off.

The interns recognized the expertise of their peers. Colleen often phoned Anthea with questions pertaining to a lesson plan. She described their mutual support:

> We talked about how developmentally appropriate some of the tasks were, and I walked her through what I was thinking. She gave me some sort of ideas of how she might do it. I always talked to her about children's literature because she was a children's literature buff. If I needed a picture book about a certain topic then she gave me three or four titles. (Interview, December 1999)

Four interns collaborated on a social studies project for primary grade students that involved co-planning and co-teaching three consecutive lessons in each other's rooms. Diana and Kathryn described how this came about:

> We met after school a couple of times and brainstormed ideas for the project. Together we developed the concept of the puppet show. Adapting the project to how we teach gave us the space to figure out what would be appropriate for our children. We kept in contact with each other about what worked and what didn't work, and what different approaches we were each trying. We planned together. We supported each other. Each of us had one lesson that completely blew us away by how awful it went. When it came to the play writing, it was really difficult to have the kids write the scripts, especially in first and second grade. We helped in each other's rooms. Each intern had a group in the room to

> work with and helped the children to write the script. That took a lot of planning. It felt really good to support each other in this way because we knew that when it was our turn to write the plays, the other interns would be there (Interview, December 1999)

The interns referred to this support as a means of encouragement for keeping focused. "We were constantly sharing ideas that we'd seen in our classroom. We're talking about things that we do and we talk about our feelings. We can even get our frustrations out if we need to." The interns also valued spending time together away from school. Monthly dinners and celebratory birthday cakes with PDAs and mentor teachers were highlights of this social experience for many. Colleen liked "seeing each other outside of school on social occasions." Mark commented about the support that the interns gave each other outside of school.

> We spent time with each other over the weekend collaborating on methods coursework. I feel comfortable asking any of the other interns a question and getting an honest feedback. I talk with the interns before or after the methods classes. I talk to the interns in my building on a more regular basis. I see them in the hallway. I see them in the morning. Lunchtime was a real big talk time. (Mark, Interview, December 1999)

Special Peer Interns

Particular interns developed a special rapport with each other, offering support and trust and critical friendship. Critical friendship is a model of individual and collective action research that champions the co-construction of knowledge through collegial inquiry, conversation, and collaborative reflection within a climate of mutual vulnerability and risk-taking, trust and support (Achinstein & Meyer 1998; Cochran-Smith & Lytle, 1991; Bullough, Knowles, & Crow, 1991).

When she found out which mentor teacher she was matched with, Diana knew that she would also be working very closely with another mentor teacher and her intern. At first, Diana was a little intimidated by the thought of teaming with another intern whom she hardly knew and with two mentor teachers who had co-planned for about 15 years. By the end of the first month, however, Diana and Kathryn were often in each other's room sharing resources and ideas. They co-planned with their mentor teachers every week and were working on their social studies project with two other interns. In this group of four interns, Kathryn and Diana were the first grade team. Together they backed each other up as the four interns negotiated what would work for a primary team. Relating her professional and personal relationship, Diana said,

> Kathryn and I have a professional relationship and a personal friendship. We are working together, but it is not always about work. It's a friendship focused around our profession. Right now, I feel like school is basically my life. There's not much of a personal life because I'm so busy with schoolwork. She understands that. (Interview, February 2000)

Towards the end of the internship, the four-way relationship between Kathryn and Diana and their mentor teachers, Jayne and Margaret, was furthered strengthened when they collaborated to reshape and rewrite one of the primary science units, Prehistoric Life.

Intern Building Meetings

Interns attended weekly meetings that were informal lunchtime gatherings held in the different school buildings. Interns were encouraged to present issues for group discussion. If they are afforded

time to analyse their practice through collective conversations, novice teachers become much more aware of the often self-imposed procedural constraints that, at minimum, prevail upon and, more likely, incarcerate their practice (Brookfield, 1995). When preservice teachers are given opportunities to collectively reflect on their practice, the experience of group supervision provides a framework in which they can ask questions. The intern meeting was an open-ended space that furnished the interns with opportunities to learn collaboratively and collectively through dialogue and reflection. The interns expressed tentative ideas, actively listened, discussed problems, and offered suggestions. "Getting feedback instantaneously and piggybacking off people's ideas helps me to see more than one perspective about the issues we are talking about" (Sally, Interview, February 2000). Given a forum such as the weekly intern building meeting to dialogue with their peers, interns can explore the assumptions behind their everyday classroom practice in a safe and non-threatening environment. Such a meeting was welcomed by Colleen:

> It was the only time each week that the five of us sat down in the same room. It became an opportunity for us to talk about specific incidents and share ideas. We were a very close-knit building in terms of the interns. We visited each other's classrooms. We knew the children. When one of us talked about a child in her room, we knew the context and the background to really understand. Our ideas took into account the other variables in the classroom. Our conversations focused on ways that we can create spaces within schools to get our voices heard. And also within the PDS program. (Colleen, Interview, February 2000)

All too often educators ignore the value of listening, diminishing its importance. Prospective teachers are expected to spend a substantial amount of their time actively listening to others — mentors, administrators, university supervisors, parents, and, of course, children in their classrooms. It is not often that anyone listens to novice teachers and, when they find someone who will give them the 'time of day,' it is usually a relative or friend, unfamiliar with the school culture, who can sympathize but not empathize. The need "to be listened to, to be taken seriously, to be understood" (Rogers & Babinski, 1999, p. 40) was of great significance for these interns as they wrestled with shaping their professional identity and developed respect for their own and other's practice. A daily batch of dilemmas threatened the competence and confidence of the interns' teaching skills. During their gatherings, the interns sized opportunities to actively listen, and to be actively listened to. In this way, they recognized and valued the power of being heard. This is how Diana valued the intern meeting time each week:

> I spend much of the time in school listening to everyone else talk. There are times when I need my time to talk. Sometimes I talk to be responded to, and other times I talk to get something off my mind. By articulating my thoughts with the other interns and our building PDA sometimes, I give direction to my own wondering. I need space to do that. Sometimes, it's a problem. Other times, it's something I did well or saw that I want to share. And sometimes, it is something funny. (Interview, February 2000)

Other Professionals as Mentors

Principals

Little research has been conducted on the role of the principal in the PDS context (Stevenson, 1995). Although a number of studies refer to the role the principal plays as beginning teachers are socialized into the school setting (Knowles, Cole, & Pressman, 1994), there are no reported studies that document the supervisory impact of a principal in a preservice field experience.

Diana counted her principal as a member of the PDS community who played a mentoring role. She described how her principal came into her classroom to teach a reading and language arts station. The purpose of this weekly visit was twofold. First, the intern was freed from her teaching centre to observe her mentor teacher at another one. Second, since the principal's expertise was meeting the needs of special education students, every other week Diana focused on practices that the principal implemented for motivating reluctant learners. In the following journal excerpt, Diana reflected on how the principal demonstrated a particular teaching strategy that helped her to make sense of teaching hand writing to first graders:

> One morning when Ms Barter was at my handwriting center. I noticed one child in particular had written a whole sentence. Usually this process of helping this child to write three words feels like 'pulling teeth.' She showed me a way that she used to help the child with copying the letters. After Ms Barter copied the word into the child's journal, she underlined the space on the line where he was to write to help him see how much of a space that word should take. Just those underlines on the paper motivated this student to write more than I had ever seen him write in fifteen minutes.
>
> I believe the principal views me as a professional teacher in her building. When she is in our room, Ms Barter gives me feedback. For example, "I really like the way you interact with children." Sometimes, when she sees me in the hallway she asks, "How's your mom?" [Diana's mom has cancer] Or, "How are the classes [method courses]?" I consider her to be one of my mentors. (Diana, Interview, February 2000)

Classroom Paraprofessionals

In this particular school district, a program known as the K – 2 Fail Safe Program was initiated several years ago that placed a paraprofessional in every primary grade classroom. Hence, many of the interns teach in classrooms where multiple adults work with the children. Learning how to assign roles, organize groups of children with various adults, and assist these adults in understanding how particular classrooms function are challenging tasks for interns. In undertaking these requirements, the interns welcome another member into the PDS community whose function is framed as an important source of mentoring. One of the organizational tasks her paraprofessional [Nancy] assists Diana with is planning the literacy workshop and math stations. The different tasks that Diana designs for her groups of children reinforce the skills that the children are learning at Nancy's station. Each week they spend time co-planning and discussing at what point each child is, how much more practice they need with a particular concept or letter sound, and how they can figure out a task to review a number fact. They aspire to "communication clearly" (Diana, Interview, February 2000).

Building Professionals

In seeking out the expertise of professionals in their building, the interns in the PDS context found the specialists in their schools particularly helpful with providing resources about specific behavior disorders and learning problems. The Title I teacher, the speech pathologist, the psychologist, and the guidance counselor were building professionals that the interns listed as adults from whom they sought information and advice. The interns valued the opportunity to "bounce ideas" off these specialists, who spent considerable time in their rooms with special needs children. They felt that their close working associations were improved by a shared understanding of the child's needs. Additionally, the interns asked for feedback about their classroom practices from the building professionals. They sought strategies that would enable them to help the child be more successful in the context of the classroom.

The interns attended IST meeting with their mentor teachers. This experience was deemed very helpful in understanding the background and behavior of the special needs child. The interns confidently reported that the building professionals would be people in the school that they turned to for support and understanding of the special needs children in their classes. Caran said she felt

> comfortable going and talking to the other people in the school, such as the counselor (Interview, February 2000).

District Curriculum Coordinators

The interns attended team unit planning meetings with their mentor teachers. Individual interns developed professional relationships with the curriculum specialists in this school district. About midway through the internship, Caran accepted an offer from the math and science curriculum coordinator to watch her teach a math lesson. In the following journal excerpt, Caran described benefits of this experience:

> In a discussion with Carolyn [math/science curriculum coordinator], I mentioned my interest in teaching math for conceptual understanding. She offered to observe a lesson and discuss it. She joined my group of third graders for one of our final lessons on subtraction and regrouping. During the lesson, we worked on interpreting word problems and learned how addition and subtraction relate to each other and to real-life situations. We did this by constructing fact families and writing word problems to represent the different equations in the families.
>
> After the lesson, Carolyn offered to return the following day during a special to meet with me and discuss the lesson. She returned the next day with a number of resources and talked with me about my lesson. We focused on the types of questions I posed. She also offered suggestions for the test I was composing. We discussed the importance of including both procedural and conceptual questions on an assessment. (Interview, February 2000)

Caran was very encouraged by the curriculum specialist mentoring. She believed that it demonstrated the support for beginning teachers in the district and the importance of having that guidance. Further, Caran felt that the test she constructed to assess her students' learning was more effective after the mutual discussion. Last, Caran was reassured by the positive feedback regarding her developing abilities in mathematical questioning from someone whom she considered to be an expert. She planned to continue this mentoring relationship for the next math unit with her fourth grade students.

Parents as Mentors

As Knowles, Cole, and Presswood (1994) point out, teacher education programs typically do not prepare teachers to work with parents and other nonprofessional community members. Williams (1992) research called for teacher education programs to provide opportunities for preservice teachers to develop skills and appropriate attitudes for interacting and inviting parents to be active members of the classroom learning environment. The dearth of studies that directly explore the role of parents and community members in the crystallizing experiences of prospective teachers continues to reinforce the premise that the matter of preparing teachers to work with parents is largely ignored in teacher preparation courses (Knowles, Cole, & Presswood).

Beyond what preservice teachers can offer to parents is looking at what parents can contribute to

the development of preservice teachers. The majority of preservice teachers have not had experiences of raising their own children. Recognizing the expert knowledge that parents can contribute, several interns followed the advice of their mentor teachers and sought out parents of children in their classroom.

Kathryn searched for ways to advocate greater involvement of parents in her classroom. When a parent offered to co-teach a science lesson, Kathryn considered this as an opportunity to expand her thinking about scientific inquiry and explore other ways to teach the concept of light to first graders. This particular parent was considered an expert on light and had experiences teaching undergraduate science majors. After seeing the parent one day in the hallway, Kathryn invited her to co-plan the lesson. When working with a parent as a guest teacher, Kathryn listed considerations that enhance the learning experience for children and offer parents a mentoring role for a beginning teacher. First, she realized the importance of designing mutually agreed upon activities with the parent and making sure that both parties have the same image of what those lesson activities look like. Second, creating a lesson plan for the parent and teacher to follow can remind them of the lesson components. Third, Kathryn recognized the proactive stance of discussing with the parent some classroom management for keeping the children focused on the tasks. And last, Kathryn acknowledged how she had benefited from the parent's knowledge about the concept of light.

Back-to-school night at the beginning of the internship and student-led conferences mid way and towards the end of the school year were recognized as opportunities for the interns to start to build and continue relationships with parents. Most interns were encouraged to see the support that parents showed for their children's success. The interns were concerned about how parents viewed the role of the intern in the classroom. While some were excited that parents seem to consider the intern a 'teacher,' others did not get the same sense. Some parents took the opportunity to introduce themselves to the interns and discuss some of their concerns. The interns learned that making themselves known is a two-way street, as for example, Sally's comments:

> We need to make the effort to overcome some of uncertainties and make the first approach. When I chose to do that, my openness was well received. The parents I met showed me that we are common advocates for their child. I need to further my understanding of how we can work together to help their child who is my student be successful in school. I know they have much to offer to show me how to do this. (Sally, Interview, December 2000)

The concluding section draws assertions and offers research suggestions for exploring further supervision in the context of a PDS.

Assertions

Assertion 1: Multiple mentors engage in a process of formal and informal preservice teacher supervision in the PDS context and form a community of support that helps each intern become a professional teacher: *E pluribus Unum* – Out of the Many, One.

As the PDS interns in this study acquired a deeper understanding of the learning-teaching process, both inside the classroom and within the context of the school system, they received support from multiple mentors in different ways. The interns developed an understanding that formal and informal supervision are vehicles for inquiry and experimentation, and a process of formative supervision engaged

in by multiple mentors.

The community of mentors, including preservice teachers, school children, classroom teachers, university faculty, administrators, building professionals, and parents, comprised the contextual nature of PDS supervision. As many different mentors nurtured the interns in the individualized process of learning to teach, it empowered them to take a role in the supervision process themselves. As they recognized their mentors and what they had to offer, the interns adopted a more active role in the supervision process, and expanded their network of support within the PDS community. In doing so, they created spaces in which to grow to become teachers.

> My many mentors have expertise they are willing to share. The PDAs included reading specialists, an author of a book on classroom learning environments, a technology and math education teacher, and a social studies instructor. I feel comfortable going to any of them with a question in a content area. Some of the mentors in our building are experts in cooperative learning, inquiry in science, and service education. Two of my parents are professors with science and engineering backgrounds. My principal is a special education teacher. My mentor teacher has been teaching first grade for five years, and by this time of the year, my first graders are experts about me. They are all there to help me. I borrowed strength and support from people who willingly lent it to me. Now I can lend it to others. (Kathryn, Interview June 2000)

Through the process of mentoring, the interns raised their voices, explored differing perspectives, and questioned and monitored their teacher thinking and behaviour. As they co-directed their own development, the interns' personal meaning of the function of supervision shifted from thinking of mentoring as being 'apart' from, to being 'a part' of (Silva, 1999), their professional growth.

When nurtured in a PDS context, formal and informal supervisory practices in a school-university community create a process for reversing three negative aspects that have in the past defined institutional approaches to teacher learning and preparation: "Figure it out yourself"; "Do it all yourself", and "Keep it to yourself" (Darling-Hammond, 1994, p. 8). The interactive nature of the intern-mentor-PDA triad becomes a means of individual professional and personal growth. The interns described an enhanced role for the university supervisors within this triadic relationship. Within the supervisory learning community, the interns were nurtured by multiple mentors with whom they [interns] individually and collectively began making sense of learning to teach in a PDS context.

Additionally, formal and informal supervisory practices in the PDS context offered the interns the space in which to individualize their mentoring experience. Through co-planning, co-teaching, and co-inquiring, the interns invited their circle of mentors to support and share their conceptual development of children. As they inquired formally and informally into self, context, and community, children's thinking and ideas, and teacher identity, the interns made choices regarding the depth and extent to which they developed supervisory relationships.

Assertion 2: PDS interns learn about teaching and how to teach primarily through mentoring from a designated mentor and a PDA. Further, interns learn how to be a teacher through exploring, nurturing, and expanding their teaching practices, thinking, and professional relationships in a community of multiple mentors.

Throughout the internship experience, the PDS interns identified their mentor teachers and PDAs as their principal guides and mentors. The heightened role of the PDS university supervisor in this triad relationship is well evidenced in the previous section of this paper. The second part of this assertion focuses on how relationships with members of the PDS community outside their classroom environments nurtured the interns' understanding of how to be a teacher. As they recognized the multiple supervisors in their PDS experience, the interns deepened their thinking about the interdependency of learning about teaching and how to teach, and how to be a teacher. The PDS interns learned how to be a teacher by opening up their thinking and teaching practices to a community of multiple mentors, and seeking to develop professional relationships with their colleagues.

> I am learning to teach by observing, interacting, modelling, and collaborating with my mentor teacher. I reflect by myself. I talk, reflect, and share with my PDA, and sometimes the other methods course professors. I am learning to teach by listening to my children. They tell me what I need to know. I am learning who a teacher needs to be and what roles a teacher needs to play by listening, interacting, and modelling the other members of the school community – other mentors and interns, my principal, sports coaches, parents and other professionals in the building such as the learning support teachers. When the year began, I thought of my mentor teacher and PDA as the people who would help me the most. They are still my main teachers, but there are many others who offer me experiences. I realized that when I go beyond the classroom to do such activities as volleyball coaching, I see what being a teacher really means. Now when I walk down the hallway and fifth graders recognize me, I know that I could feel comfortable teaching another grade level. It is knowing the children and the other adults that is important, not only the content. (Kathryn, Interview, June 2000)

Further, PDS interns are inducted as members into a community of professional educators in which collaboration becomes an accepted and valued norm for supporting children's learning. Through supervisory relationships that are cultivated in the PDS community, newcomers and 'old-timers' (Lave & Wenger, 1991) negotiate the extent and depth of these mentoring opportunities. The interns assessed the beliefs, knowledge, values, and practices shared by the community. Calderwood (2000) describes a community of professional educators in which power is shared and knowledge about teaching is socially constructed. This community is sustained over time by a system of learning that ensures the continuation of the existence of the community. Learning how to be a fully participating community member can take some time and may require intensive monitoring of the novice by the expert practitioner.

Through on-going conversations with their 'old-timer' (Lave, 1991) colleagues in the PDS community, the interns developed an understanding of what it means to do the work of teaching, supporting and enhancing children's learning, and what it means to do the job of teaching, fulfilling classroom and school-wide goals. Coping with multiple roles and the numerous responsibilities associated with both the job and the work of teaching became a source of dissonance for these novice teachers. The interns did not resolve all of the frustrations associated with this discrepancy. Instead, they found ways to negotiate the tension that arose when they attempted to realise teaching and learning goals and organizational demands. Instead of assuming that the responsibility for resolving dilemmas was theirs, the interns asked other members of the PDS community: Who can help me understand these concerns? What resources would help me to better understand these issues? Who would be a role model for me to observe and ask questions? Who could give me feedback on how to maintain a sense of balance in my personal and professional life?

As they differentiated and negotiated the work and the job of a teacher, the interns' thinking diverged from that generated by a student teacher in a traditional teaching experience (Bullough, Knowles, & Crow, 1991). Typically, a novice teacher in a traditional student teaching placement is assigned to a single classroom teacher and is required to understand teaching as a discrete classroom-based enterprise (Cochran-Smith, 1991; Knowles, Cole, & Pressword, 1994). Rather, the PDS interns perceived themselves to be welcomed newcomers to a professional community of practice (Lave & Wenger, 1991). As they fostered supervisory relationships within the community of practice, the interns demonstrated that learning about teaching and how to teach, and how to be a teacher are interconnected processes. Additionally, and most importantly, the interns recognized that the synergistic power of these processes lay in their interdependence. As they individually shaped these processes, the interns fathomed how to be elementary school teachers who supported and respected children's learning in the best possible ways.

Diana offered some advice for future interns as they figure out ways to become newcomers in the PDS community:

> Take time to look at the impact you are having on those around you. Some of the most rewarding moments are those when you realize that you have made an impact on someone else. It will be easiest so see the influence you have on your students. However, be sure to look for the signs of growth due to your influence on others like your mentor, supervisor and other interns. These impacts may not be as noticeable to the naked eye, but if you take the time and look for them, you will see they are there. Be sure to simply stop and look around you at least once a week and observe the growth you have influenced. You will appreciate these memories most when the year is over and it is time for you to move on to your next challenge. These memories will help you realize the enormous impact you made as a teacher and friend. (Diana, June 2000)

Conclusion

The notion of a powerful community of multiple mentors involving preservice teachers, school children, classroom teachers, university faculty, administrators, building professionals, and parents recognizes the contextual significance of, and highlights the implications for, supervision. The long term exposure for the PDS interns to the assisting functions of communal mentoring from individual and teams of university faculty and elementary school teachers, 'supporting, sponsoring, guiding, advising, befriending, and protecting' (O'Hair & Odell, 1994), nurtures a formative supervisory approach. PDS interns' understanding of the supervision process shifts from exclusive expert and evaluative transmission to collaborative and communal efforts that are characterized by individualized and interdependent discovery, experienced guidance, and diverse perspectives.

Conversational channels carved in a learning community of multiple classroom mentors in a PDS culture enrich and enhance prospective teachers' thinking. Interns are empowered to earnestly reflect about their instructional and social practices in their classrooms. Formerly such dilemmas were accepted as "the way it is." Now, interns are encouraged to develop context-related alternatives for stimulating student achievement and mentored to assume shared responsibilities for their professional growth. The process of multiple mentoring structures opportunities for interns to individually and collectively think through their beliefs, share ideas, challenge current institutional practices, contemplate theory and practice, as well as identify personal and professional needs. The PDS community members mentor novice teachers to raise questions about their teaching practice. This is an avenue for collaboratively

exploring possible alternatives for professional growth.

The power of multiple mentoring in a learning community deserves further inquiry. Current research in the PDS collaborative between State College Area School District and Penn State University is examining how the interns' lived experience shape their understanding of the practice and profession of teaching. The findings may extend the research literature in relationship to ways of constructing 'knowledge of practice' (Cochran-Smith & Lytle, 1999) through mentoring in an inquiry-embedded supervisory model of teaching and learning. Further studies need to be directed toward examining the culture of the school-university collaborative and the role of the mentors in this culture. What is the relationship between assessing and assisting preservice teachers? What are alternate configurations of the supervisor/supervisee relationships? What is the relationship between content expertise and supervisory effectiveness? Related to this, what does the supervisory process look like when interns have greater understanding of the curriculum content that their mentors? What is the impact of mentoring on other members of the learning community? How can school and university structures be massaged to support learning communities of multiple mentors? Why do reformers focus on isolation as a key factor for change in teacher education preparation and practice? How do such supervisory restructuring efforts contribute to changes schools and university cultures and professional growth? Lastly, and most importantly, What is the impact of group supervision on student achievement in a PDS community?

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